

THE ENGLISH PILOT...ORIENTAL NAVIGATION

1755

1. A new map of the World according to Wrights allas Mercators Projection &c
2. A new and correct chart of England, Scotland and Ireland
3. A correct charts of the Channel between England and France
4. A large draught of the Isle of Wight and Owers
5. A new & correct large draught of Plymouth Sound
6. A chart of the coasts of Ireland and part of Scotland
7. A chart of the sea coast of England to the Streights
8. A correct chart of the coast of Portugal & Barbaria
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10. A generall chart from England to Cape Bona Espranca
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22. A large draught of part of the coast of India
23. A large draught of the Mallabar coast
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25. A large chart of part of the coast of Coremandell
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27. A new chart of the coast of Orixia and Galconda
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Atlas 3.75.3

A NEW MAP OF THE WORLD

Drawn from the Newest and the most Exact Surveys
With other Considerable Improvements &c.

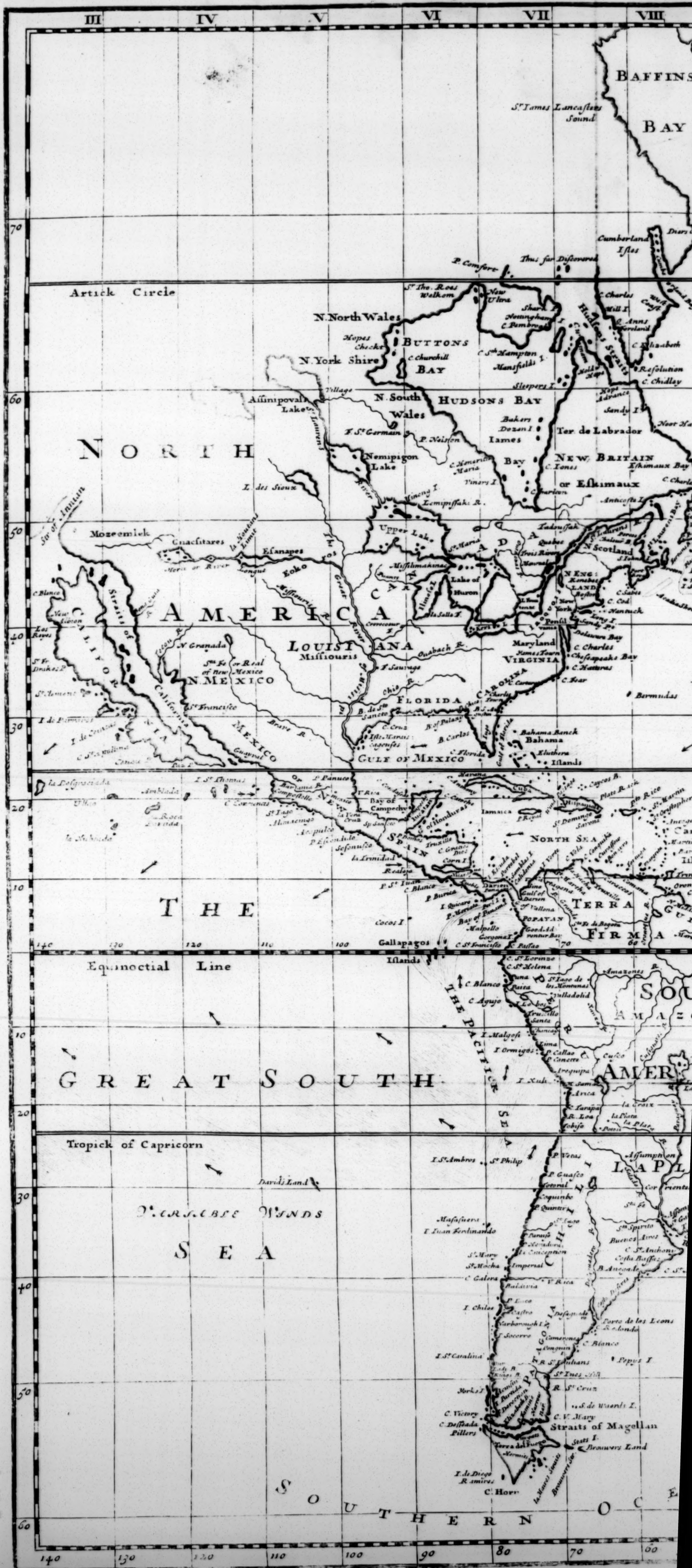


At Exact Observations together with a view of the General and
&c. By Rich^d Mount and Tho. Page on Great Tower Hill London.



A NEW MAP OF THE

Drawn from the Newest and the most
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At Exact Observations together with a view of the General and
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NG TO WRIGHTS ALIAS MERC

view of the General and Coasting TRADE WINDS, MONSO



CATORS PROJECTION &c

SOONS or the Shifting TRADE WINDS

H. Moll Fecit.



view of the General and Coasting TRADE WINDS, MONSOONS



Note, that the Arrows among the lines shew the Course of those General and Coasting Trade Winds and the Arrows in the void spaces shew the Course of the Monsoons or Shifting Trade Winds and the Abbreviations Sept. &c shew the Time of the year when such Winds blow.

SOONS or the Shifting TRADE WINDS

H. Moll Fecit.



T H E

E N G L I S H P I L O T,

Describing the Sea-Coasts, Capes, Headlands, Streights,
Soundings, Sands, Shoals, Rocks and Dangers. The
Bays, Roads, Harbours, and Ports in the

O R I E N T A L N A V I G A T I O N,

Shewing the Property and Nature of the Winds and
Monsoons in those Seas; with the Courses and Distances
from one Place to another: The Setting of the Tides
and Currents; The Ebbing and Flowing of the Sea.

A L S O,

A New TABLE of VARIATIONS; and a Correct TABLE of
LONGITUDES and LATITUDES;

With many other THINGS necessary to be known.

Containing several large Draughts of Ports, Islands, and Descriptions; collected
from the Practice and Experience of divers able and expert NAVIGATORS
of our Own and Foreign NATIONS.

Divided into THREE PARTS.

The F I R S T, Shewing

The Nature and Properties of the Winds and Monsoons in the Navigation from *ENGLAND*,
to the *EAST-INDIES*, and the whole *O R I E N T A L O C E A N*, and thereby
how to shape a Course from one Port to another, according to the Time of the Year in those Seas.

The S E C O N D, Containing

Necessary INSTRUCTIONS for Sailing between *ENGLAND*, and the *EAST-INDIES*, in the Spring and Autumn.

The T H I R D, Describing

The Sea-Coasts, Capes, Headlands, Streights, Soundings, Sands, Shoals, Rocks and Dangers. The
Islands, Bays, Roads, Harbours and Ports, from Cape *BONA-ESPERANCE*, to
all Parts of the *O R I E N T A L O C E A N*, being very much Corrected and Augmented
with several ADDITIONS, not before Publish'd.

L O N D O N:

Printed for W. and J. MOUNT, T. and T. PAGE, on *Tower-Hill*.
M,DCC,LV.

T H E

E N G L I S H P I L O T.

B O O K I I I.

Part the F I R S T,

Shewing the Nature and Properties of the Winds and Monsoons in the
Navigation between *ENGLAND* and the *EAST-INDIES*,
and all over the *ORIENTAL OCEAN*.

*Shewing the Nature and Properties of the Winds and Monsoons between
ENGLAND and the EAST-INDIES.*

The acquaintance with the Nature of the Winds is an Advantage for the safest and surest Course for INDIA.

Collections taken by several able & judicious Navigators. The Variableness of the Winds. The N. E. Trade-wind.

IT is very requisite for all those who take Charge of Ships to *INDIA*, and come from thence, that they are well acquainted with the Nature of the Winds in those Seas, in all the Seasons of the Year, by the Knowledge of which, Advantage may be made to shape such a Course that may be the safest and surest for such an intended Voyage, either going out, or coming home.

To that End, these Collections have been made from several Experiences and Observations, that have been taken by several able and judicious Navigators, both of our own and other Nations.

First of all you may take Notice, That between *England* and the *Canary Islands*, the Winds are variable and unconstant.

From the *Canary Islands*, Southward, is commonly found a N. E. Trade-wind, which in one Season of the Year bloweth farther than in the other,

In the following manner.

How far the N. E. Wind bloweth in January, &c.

In *January*, *February*, and *March*, the N. E. Trade-wind bloweth commonly to four Degrees of North Latitude; where at that time beginneth the South East, and Easterly Trade-wind.

How far the N. E. Wind bloweth in April.

In *April* the North East Trade-wind bloweth commonly to five Degrees of North Latitude, where then beginneth the South East Wind.

How far the N. E. Wind bloweth in May.

In *May* the North East Trade-wind bloweth to six Degrees of North Latitude, where at that Time beginneth the South East Wind somewhat more Southerly.

The N. E. Wind in June.

In *June* the North East Trade-wind bloweth to eight Degrees of North Latitude, where then beginneth the Southerly Wind.

The N. E. Wind in July.

In *July* the North East Trade-wind bloweth to ten Degrees of North Latitude, where then beginneth the Southerly Wind somewhat Westerly.

The N. E. Wind in August.

In *August* the North East Trade-wind bloweth to eleven Degrees of North Latitude, where the Southerly Wind begins somewhat Westerly.

The N. E. Wind in September.

In *September* the North East Trade-wind bloweth to ten Degrees North Latitude, where the Southerly Wind beginneth.

The N. E. Wind in October.

In *October* the North East Trade-wind bloweth to eight Degrees of North Latitude, where then the Southerly Wind beginneth somewhat Easterly.

The N. E. Wind in November.

In *November* the North East Trade-wind bloweth to six Degrees of North Latitude, where the South East Wind beginneth.

The N. E. Wind in December.

In *December* the North East Trade-wind bloweth to five Degrees of North Latitude, where the South East Wind beginneth.

It is to be observed, That between the North East and the South East Trade-wind, the Winds are subject to Alteration, which Variableness is sometimes found a Degree or two sooner or later than the aforesaid Latitude; the more Northerly you are the more is the Variableness found to be about the North, and the North East; and the more Southerly you are, the more are the Winds found to blow about the South East and the South.

Upon the Coast of *Brazil* the Winds often blow Easterly from *March* to *September*, and to the Northward of the East; and from *March* to *September*, it bloweth oftentimes between the East, South East, and South South East, according as you are nearer or further from the Land; the nearer to the Land the more Southerly. But upon the Coast of *Angola*, on the *African Shore*, you will always have Southerly Winds.

From *Cape de Bona Esperance*, *St. Helena*, *Ascension*, and from thence until you come under the Equinoctial-line, the Wind is commonly S. E.

Between 28 and 35 deg. of South Latitude, the Winds are subject to Alteration.

To the Southward of 35 or 36 deg. of South Latitude, is commonly found a Westerly Trade-wind, which is not so constant in *January*, *February*, and *March*, as in the other Season of the Year.

The Westerly Trade-winds to the Southward of 35 or 36 Degrees of South Latitude, and to the Eastward of *Cape Bona Esperance*, to the Land of *Andracht* (so called by the *Dutch*) are constant; but in *January*, *February*, and *March*, the Winds are variable and subject to Alteration; as they are also to the S. ward of *Cape Bona Esperance* in 35 Degrees of South Latitude, and 200 or 300 Leagues to the Eastward of the Cape as aforesaid. To the Westward of the Cape the Winds oftentimes blow Easterly.

Between the 35 and 28 Degrees of South Latitude, the Winds are very subject to Alteration, which sometimes extend as far as the Tropick of *Capricorn*.

To the Eastward of *St. Laurence*, all over the *Indian Ocean*, betwixt 10 and 11 Degrees of South Latitude, and sometimes as far Southerly as the Tropick of *Capricorn*, there is commonly found an ordinary Easterly Trade-wind, which is also found more Southerly to 28 Degrees South Latitude, where it bloweth so all the Year long.

Between the Equinoctial-line, and 10 or 11 Degrees of South Latitude, one half of the Year the Wind is Easterly, and the other Westerly.

The Easterly Monsoon is reckoned to continue from *April* to *November*; and the Westerly Monsoon from *November* to *April*, which in *December* and *January* bloweth hardest: *April* and *November* are accounted the turning Months.

Shewing

Shewing the Nature of the Monsoons in the South-Seas, and the adjacent Islands.

In what Months the bad Westerly Wind bloweth at Bantam, &c.

In Feb. the bad Weather decreaseth till the end of March.

Easterly Winds from the beginning of May. Easterly Winds bring clear weather.

Alteration of Wind in the Month of October.

The Monsoon begins sooner or later.

The Westerly Wind & Current.

Easterly Winds do not blow so hard as the Westerly.

It is more trouble to sail with Westerly Winds and Currents, then with the Easterly Monsoons.

At what Places the Monsoons bloweth more out of the N.W.

Good Anchor-ground

With the New or Full Moon, and a Spring-Tide the Current runs somewhat more against the Monsoon than at other times.

Great Rain in Borneo.

AT *Batavia*, and all along the North-side of *Java*, and also on the North-side of all the Islands which are situated upon one and the same Point to the East from *Java*, as far as *Solor* and *Timor*, the bad Weather (which is the Westerly Wind with Rain) commences at the beginning of *November*, and in *December* it blows and rains harder, in *January* hardest of all; and then fall the greatest Showers, which continue till the midst of *February*, from which Time the bad Weather (to wit) the continual Westerly Winds, decrease till the end of *March*. In *April* there is fair Weather with Alteration of Wind, and a great deal of calm smooth Water; sometimes with a full Moon, there are Tempests blowing from the Western-board, continuing till the beginning of *May*, at which Time the Wind beginneth to turn to the East.

And from the Beginning of *May*, there are Easterly Winds at the said Places, with little Rain in *June* and *July*.

The Easterly Winds blow the hardest, without any Rain, except some unexpected Showers, which fall but seldom, so that at that time there is for the most part light and clear Weather, which continueth till the End of *September*.

In the Month of *October* there is again an Alteration of Wind in those Places, the Easterly Wind decreasing, and the Westerly Wind begins again; the aforesaid Monsoons, and the Currents which follow the Wind, and runs from W.N.W. or from E.S.E. upon the open Sea, passing between the Shores: But it is to be observed, that the said Monsoons in some Years begin a Fortnight, and sometimes a whole Month later or sooner, and end sooner or later than at the ordinary Time.

When the Westerly Wind and Current runneth the hardest in the aforesaid Sea, (which is in *December*, *January*, and till about the middle of *February*) it is not convenient to strive against the Wind and the Current, although there were good Anchor Ground along the Shore. For if your way were somewhat further, there will a great deal of trouble, and as much Time lost, as by staying for an Easterly Wind: But if there be no great Distance between the Place where you are, and the Place you are bound to, as suppose from *Batavia* to *Bantam*, you may then go well enough.

The Easterly Winds do not blow so hard upon the same Point by a great deal, as the Westerly Winds do; for which Reason it is possible at the Time of the Easterly Winds, to come from the Westerly Places to the Easterly ones: As for *Bantam*, *Batavia*, *St. Banca*, and also as far as *Solor* and *Timor* if they keep all along the Shore, and pass through within *Madura*. And because the Easterly Winds do not blow very hard, the Ships coming from the West out of the *India-Sea*, may at all Times of the Year come to the *Streight of Sunda*, and so go to *Bantam* or *Batavia*. Yet notwithstanding the Westerly Winds and Currents run a great deal harder than the Easterly, they may nevertheless at all Times, even in the midst of the Westerly Winds, sail from *Batavia*, or *Bantam* out of the *Streight of Sunda*, but with a great deal more trouble than you have at the coming in against the Easterly Monsoons.

From *Batavia* northward along the East-side of *Sumatra*, passing within *Banca*, towards the *Streight of Sabon*, the Monsoons are not regular, as at *Bantam*, but bloweth more out of the North West.

All along the East-side of *Sumatra* is found good Anchor ground, and there runneth Ebb and Flood, yet doth not keep such just Tides as in *England*, for the Current runneth a great deal longer with the Monsoon than against it.

But with the New or Full Moon, on a Spring Tide, the Current runneth somewhat more against the Monsoon than at other times; by reason whereof Ships may sail against the Monsoon in this Sea, but not without Labour and Trouble in the Sea between *Banca*, *Bintang* and other adjacent Islands to the West, and to the East from *Borneo*, which by reason of its Calms, is by the *Portugals* called *La Malaga Delas Demas*. The Monsoon also keepeth one time and one way, as all along *Java*; but doth not observe so just a Rule about the Equinoctial, with regard to Rain and Dry Weather, as it doth in the above Places; for in *Borneo* it often Rains continually during eleven Months, at least some Rain falls every Day during that time.

And after the same manner the Monsoon ought to be reckon'd along the West and North-side of the *Celebes*, and

the *Molucques*, and along *Batachina*, or *Gillolo*, as along *Java*, and other Islands situated thereabout to the East; yet with this Distinction, that the Westerly Monsoon bloweth in the *Molucques*, out of the NNW. for which reason it is called not the Westerly but the Northerly Monsoon; and on the contrary the Easterly Monsoon bloweth in the *Molucques*, out of the S.S.E. for which reason it is not called the Easterly but the Southerly Monsoon, which continue as far as the *Mainpas*, which are three small Islands, situated on the side of *Ambello*, from *Ceram* towards *Bouro* in 3 deg. and a half of South Latitude, and this Westerly or Northerly Monsoon (according as it is called) here causes the most Rain in the *Molucques*, and the Easterly or Southerly the most Drought; as is said of the Monsoons of *Java*, and the Islands situated thereabouts; but not with so great a Distinction, as it is said to happen in *Borneo*; so that sometimes there is little difference in the Year between good and bad Weather.

And tho' in the Months of *June* and *July*, the Easterly Monsoon bloweth the hardest in the *Molucques*, and the adjacent Islands, as it is to be understood by the former Descriptions, the Ship may kedge it sometimes by the Tides against Wind and Current, passing within the Islands to *Mainpas*, where the Monsoon begins; that is, the Wind and Current out of the Eastern Board, by which you may come from *Batavia*.

Those who in the time of the Northerly or Easterly Monsoon desire to sail to the *Molucques*, coming from the Westward, thro' the *Bonequerons* by the South through the *Celebes*, may sail along the *Celebes*, within the Island *Bouton*, leaving most part of the small Islands.

About *Bouro*, also in the Seas on the East-side of *Xulla* and *Pangay*, being assisted by the Counter Current, and finding all along Anchor-Ground, you may kedge by the Shore, 'till you come Northerly enough to stretch over for the *Molucques*.

But because there are along the *Celebes*, many Sands and foul Grounds, it is far better for those who intend to sail for the *Molucques*, against the Northerly Monsoon, to go through the *Streight of Bouton*, and from thence to run over to the S. of *Xulla*, till *Ouby* appears, from thence to stretch along within the Islands, to the Northward.

To the Southward of *Mainpas*, *Ambina*, and *Banda*, and farther than *Bouro*, until you come to the *Titabosse*, with the Easterly Monsoon, (which continues here for sometime, along *Java*, and the other Places hereafter described) in the beginning, and till the midst of the Monsoon, which is from the beginning of *April*, 'till the latter end of *September*, there are very great Showers, and a very strong Wind at the same time; when along *Java*, and the adjacent Places, they have dry and constant Weather with the Easterly Winds.

And after the Easterly Monsoon is passed, the Current runs for a whole Month, or thereabouts, against the W. erly Wind; as also the Current doth after the Westerly Monsoon against the Easterly Wind.

To the Northward of *Malacca* and *Achien*, and thence Westward into the Bay of *Bengall*, to wit, along the Coast of *Coromandel* and *Ceylon*, is observed the same as at *Bantam*, and from thence Eastward, and also Westward, to the other side of the *Maldivis*, between the Equinoctial and 10 or 11 deg. of South Latitude, the Westerly Monsoon bloweth; on the contrary the Monsoon here comes out of the E.N.E. and North East. And again, that in the time when at *Bantam* or *Batavia*, and on the said southerly Points, the Easterly Wind blows here to the Northward of the Equinoctial; the common Wind bloweth out of the W.S.W. and South West, yet the time of the beginning of this Northerly Monsoon, here to the Northward of the Lines, differeth so much from the beginning and end of the Westerly Monsoon, to the Southward of the Line, that it hath been observed under *Punta Gale*, on the Island *Ceylon*, in the midst of *March*, the Wind began to blow W.S.W. and South-west, and at the latter end of *March* the Westerly Monsoon continually blows through, and that the Current runs hard to the northward continuing so till the beginning of *October*; before the Wind blows again out of the E.N.E. and North East Board, out of the Bay of *Bengall*.

Northerly Monsoon.

In Borneo there is little difference between good and bad Weather.

Eastern Board.

How to come to the Molucques in the time of the Northerly or Easterly Monsoon.

A better way to sail from the Molucques thro' the Streight of Bouton.

Very great Showers and strong Winds. Dry and constant Weather along Java, &c.

The Monsoons bloweth contrary in several Places.

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WESTERN OCEAN

A New and correct
**CHART OF
ENGLAND
SCOTLAND
AND
IRELAND**

Sold by W. and I. Mount and T. Page
on Tower Hill LONDON.

THE WESTERN ISLES



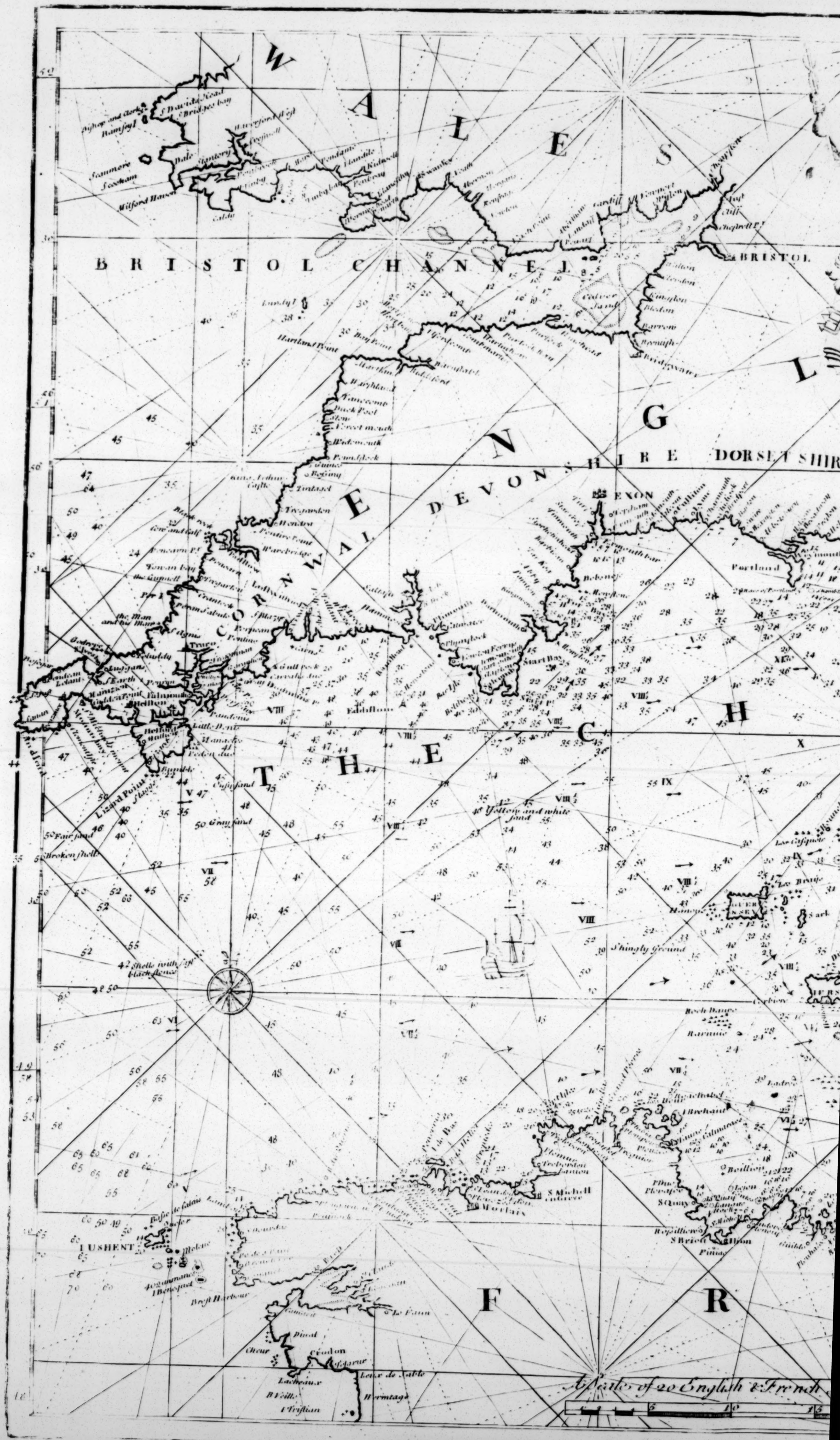
SCOTLAND

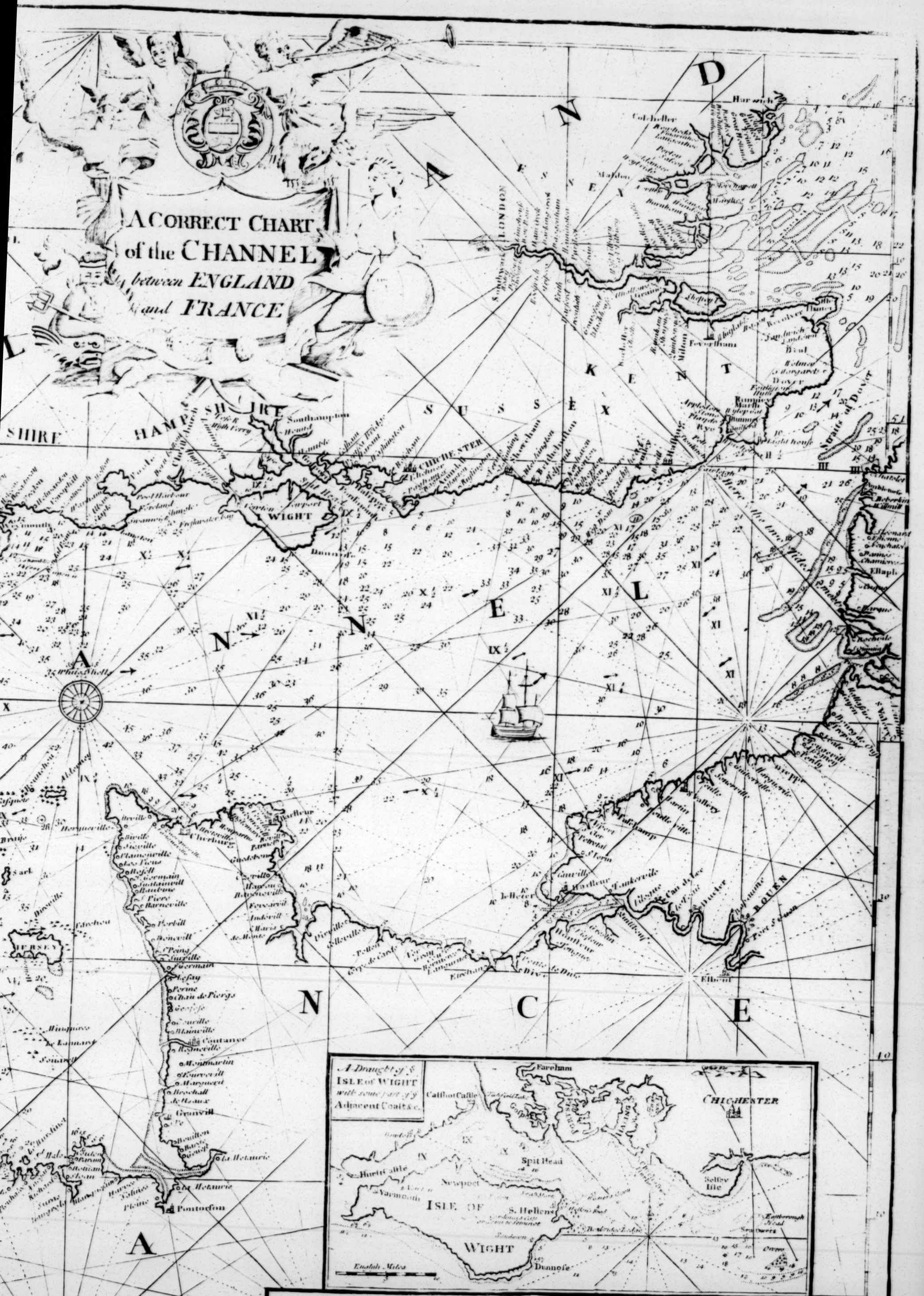
ISLES OF ORKNEY

SHETLAND I.

THE
NORTH SEA

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ADVERTISEMENT

In this Channel Draught the smaller figure are the depth in fathoms. The Letter or Roman figure show the hour of High water or rather the point of the stream that sets to the Eastward on the day of the New and full Moon. All therefore the time of the Moon Southward or Northward to the Quarter found near the place where your Ship is, and the Sum shall show you how long the tide will run to the Eastward, but if it be more than 12 Subtract is therefrom. The Direction of the Bars show upon what point of the Compass the strength of tide for effect of the place are desired to communicate them to the Publisher hereof.

P A R T

A Large Draught of the ISLE of WIGHT and the WATERS

S H I R E

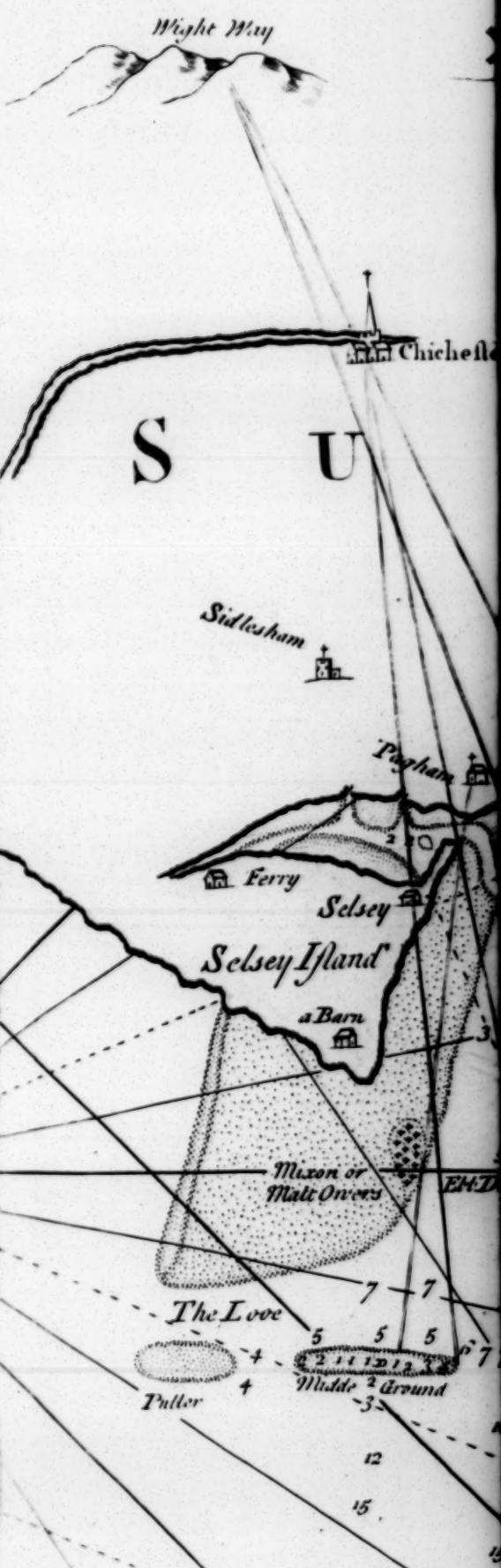
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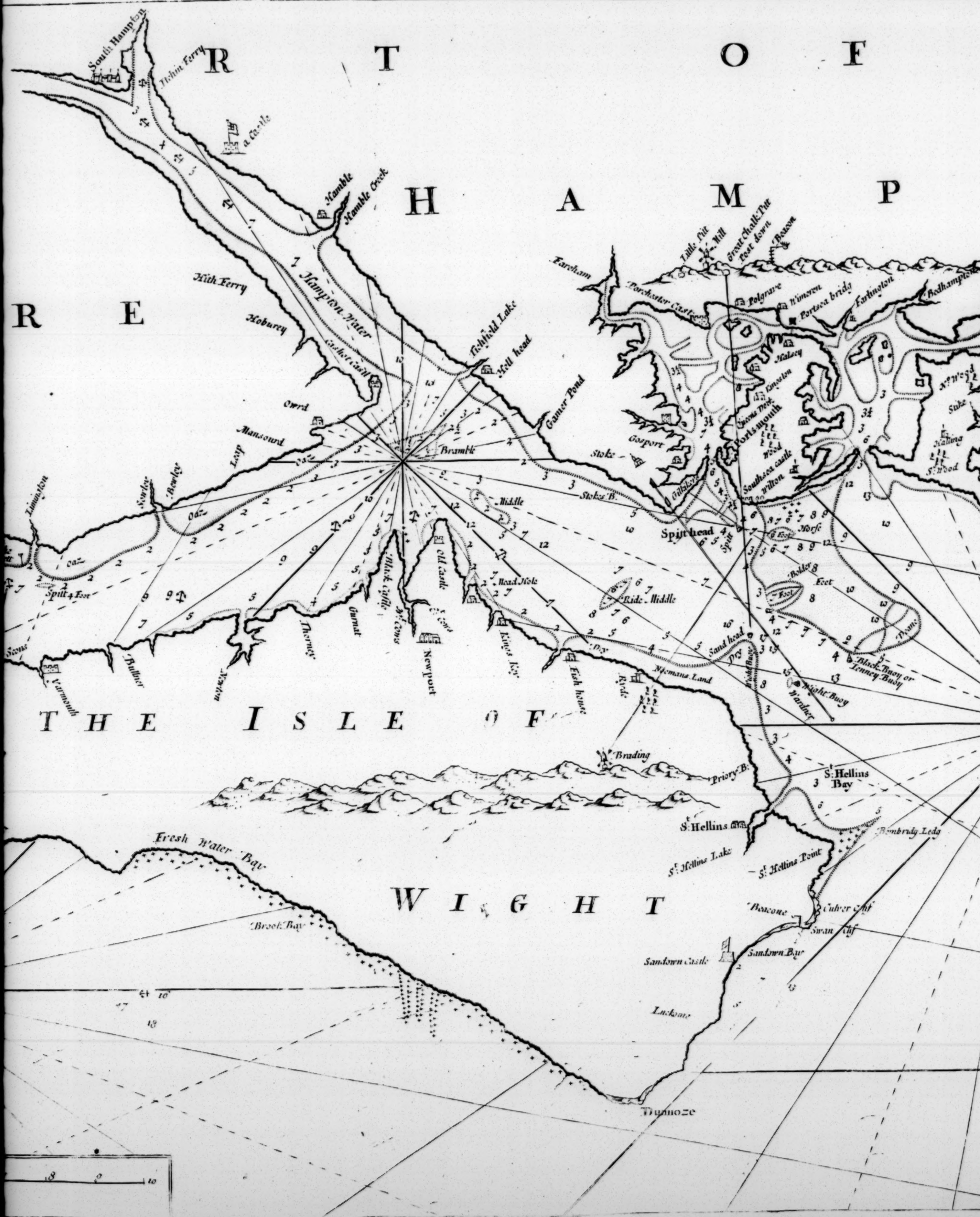
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Southampton
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Freshwater Cliffs
Fresh Water Bay
Brook Bay

A Scale of Tenn English Miles

H A M P S H I R E

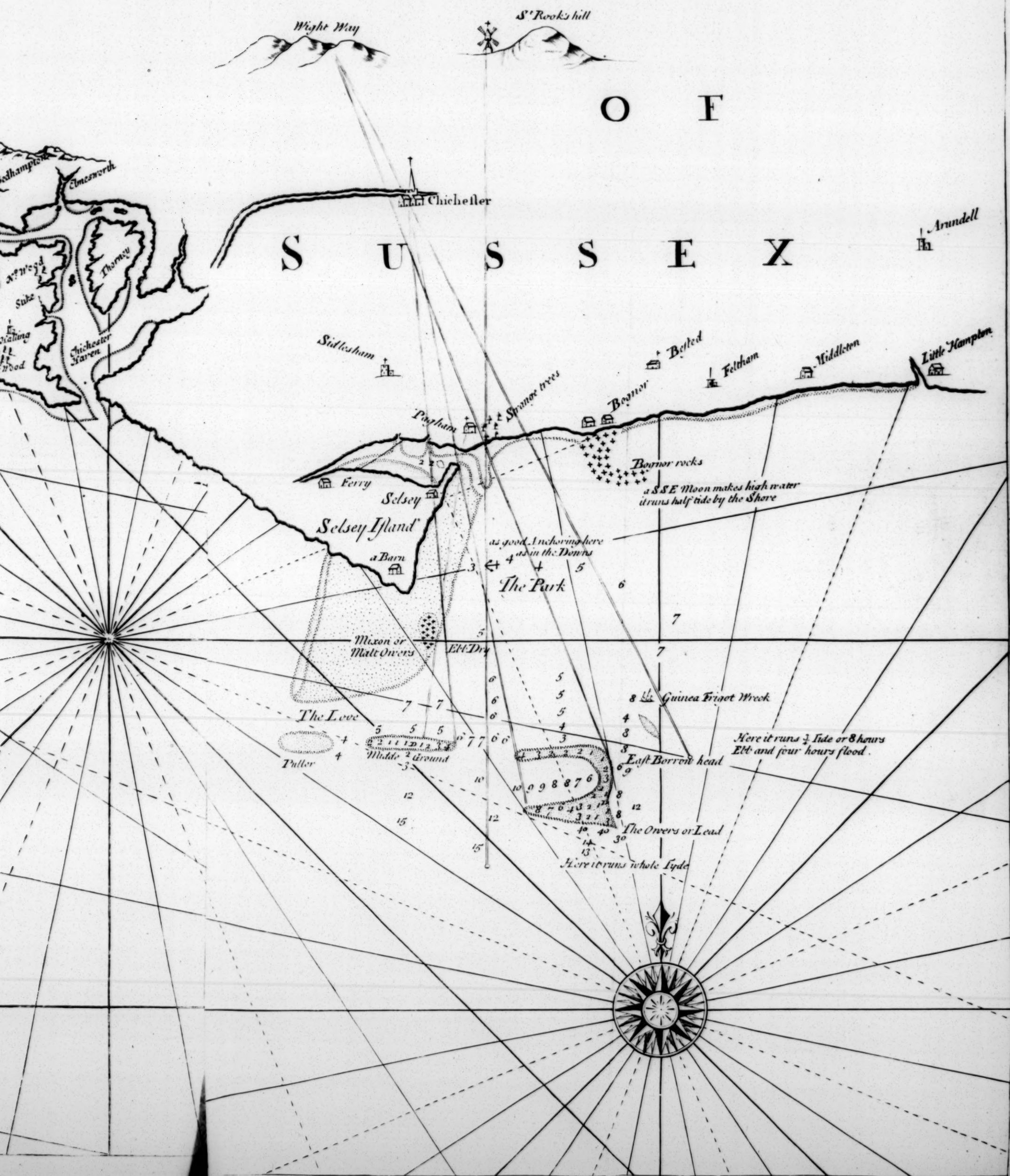




P A R T

O F

S U S S E X



Hot and unwhole-
some wind
at Masulipatam.

At Masulipatam beginneth a Land-wind in the beginning of June, continuing about 14 Days, which is exceeding hot and unwholesome, with which wind the Ships may put over from the Coast of Coremandel, and run with that wind over Atchein, or round about Sumatra, for Bantam or Batavia.

But whereas the wind in that Month, in the open Sea, in the Bay of Bengal bloweth the strongest out of the South-west, or W.S.W. and that the Current runneth very hard to the Northward, it happeneth many times that Ships have great difficulty to get Atchein.

Speediest sailing from Bantam.

The speediest sailing from the Coast of Coremandel for Bantam or Batavia is in October, November and December, with the North-easterly Monsoon, which brings the Ships to the Equinoctial within the altering Wind; or to one Degree, or a Degree and a half of South Latitude, where you will find in November and December, the West-north-westerly Wind, which carrieth you to Bantam or Batavia with speed.

The Coast of Arabia for the most part subject to S. S. W. Winds.

Some who have Navigated upon the Arabian Coast have observed, that on the Coast of Arabia, 60 or 70 Leagues from the Negroes Country, from the beginning of August till September 19, from 5 Degrees South Latitude, for the most part, is subject to S.W. Winds.

And that from September you have East-south-easterly winds under the Arabian Coast, and Currents running about the West, having under the shore great Calms; But that coming into the Sea, in the End of October, there is North East and N.N.E. Winds; and coming under the Equinoctial, in the beginning of November, W.N.W. and at four Degrees South Latitude, W.S.W. which will carry you to Bantam or Batavia.

What Wind bloweth in the Indian-Sea, between St. Laurence to the West, and Java to the East.

The Ships that sail from Bantam and Batavia homewards are carried offentimes with S. easterly Winds.

In the Indian Sea, between St. Laurence to the West, and Java to the East, 10 or 11 Degrees South Latitude, and as far as the Tropic of Capricorn, and further to the South, and sometimes to 28 Degrees of South Latitude, blow South-easterly winds all the Year long wherewith the Ships that sail from Bantam or Batavia homewards,

oftentimes are carried until they find Ground of Cape d'Agullbas, where they will find westerly winds, which leave them again as soon as they have passed the Cape Bona Esperance, and come as far as 28 or 27 Degrees of South Latitude, where they find the continual South East winds, wherewith they may sail as far as Sancta Helena, and the Equinoctial.

The said westerly winds, which are found about Cape Bona Esperance, have their Course as well to the South, (as from the Islands of Tristan de Cunha towards the Cape) as to the Eastward thereof all the Indian Sea over, to the Southward of 28 and 26 Degrees South Latitude, especially in May, June, July, and August, while it is Winter there.

But in January, February and March, which are their Summer Months, they have many variable winds, which oftentimes blow Easterly with many Storms and Showers.

The Southerly winds, which blow into the Sea from 24 or 25 Degrees of South Latitude, and as far as the Equinoctial; between Angola and Brazil, which is in March, April, May, June, July, August, and September, whilst the Sun is to the northward of the Equinoctial, for the most Part of the Time out of the South Easterly Board; but in October, November, December, January, and February when the Sun is to the southward of the Equinoctial, they blow out of the S.S.W.

And again, The Sun having North Declination, the southerly winds blow to the Northward of the Line, most out of the S.S.W. a great way to the North (to wit) unto the Salt Islands; but when the Sun is to the southward of the Line, the southerly winds keep more towards the South Easterly side upon the said Points, and do not extend so far to the North; but the North Easterly winds, which for the most part of the time blow between the Canaries and the Cape de Verde Islands, run not only to six and five Degrees, but also to the fourth Degree of North Latitude, where they come to be lost, and change in westerly and southerly winds, and also in Calms, as they are commonly called; which winds and Calms always, or for the most part of the Time continue there under and about the Equinoctial.

What Course the westerly Winds have.

Constant Winds in Jan. &c.

Several Winds between Angola and Brazil in several Months of the Year.

Variety & change of winds according to the Course of the Sun.

Calms for the most part continue under and about the Equinoctial.

The Observations of the Monsoons in the Navigation from Malacca to China.

IN the time of the southerly Monsoon, if you would sail from Malacca to China, the Currents run in the Gulf of Pulo Catao unto the Island Sinao, towards the Bay of A En seada de Cochina; this is to be understood to continue till the last of December and January, then the Current alters in this Gulf, and sets upon the Shoals, which stretch over against the Coast of Champa and Cambodia from the other side; and the later it is in the Year, viz. from January towards February, the stronger the Current sets upon the Shoals.

Monsoons of China.

In the Monsoon of China, viz. when you go from China unto Malacca the Current sets very strong from the Island Pulo Catao, unto the Island Pulo Camber; they are both situated near the Coast of Cambodia.

It happens sometimes that there are great Calms from the latter end of July and the beginning of August from the Varella unto Pulo Catao, and then you get the Tereimbos, which are winds that blow off from the Land out of the West and North-west; and the Vyracoyns, which are Winds out of the Sea from the E.S.E. and E.N.E.

and coming about to the North, and presently turning toward the South, upon which sudden Alterations the Calms immediately ensue until the Tereimbos, or Land winds come again. In the Time of the South or South-westerly Monsoons the Current runs from the Island Pulo Tayo, lying beyond the Island Aynam (upon the Coast of China) unto the Island Sauchan and the Island of Catao.

Being upon the said Coast in the Time of the South and South-westerly Monsoon; and if they turn to the East they will not turn again to the South, but will turn from thence to the North; and having blown sometime from thence, they will turn again to the East, and then from the East to the South, and if the North Easterly wind blows, then it happens well, if it turns from thence to the South-west without turning to the East, which is very seldom; but the most common Course is as above-said.

If in the Month of July other winds blow than the winds of the Monsoon, turning from one Point to another, and come at last to the North East, then there certainly follows stormy weather.

From the foregoing Observations of the Monsoons, how to shape a Course from one Port to another, at several Times of the Year in the East-Indies.

To Sail from the Coast of Brazill to the Coast of India, from April to September.

WHEN you part from the said Coast in the Latitude of 23, your best way is to haul as near the wind as you can to the South-west, till you meet with westerly winds; if bound for Cape Bona Esperance, or Cape of Good Hope, you need haul no further than 35 and 30 deg. South, or for Surrat; if bound for

Bengal, to haul into 38 S. or 40 deg. and fall in with the Straights of Sunda, then you are in a fair way to go for Batavia, &c. Bengal Ships make the West Coast of Sumatra, and run to the westward of the Nicobar Islands. Ships that are bound for the Coast of Coremandel, make Ceylon first. Ships bound for the Coast of India, steer between Madagascar and the Main, and touch at Jobanna for Refreshment. As you run for Jobanna you must not borrow too near the Island of Mobila, for it is shoal a great way off Shore: You anchor at the Island Jobanna in 20 Fathom a-breast

a-breast of *Brown's Garden*, one Mile from Shore. Sailing from *Johanna* to the Coast of *India*, if you take not great Care, you will be hauled into the Bay of *Magadexa*, as abundance of Ships are; if you are, and cannot turn it out, you may go in under the Island *Zanzabar*, you go in at the Northernmost End; the Island is guarded with Reefs; the People are of a yellow Colour, they seem to be very kind, and are govern'd by a Woman. The *Portuguese* have a small Factory there of about eight Men. The Island has Plenty of all sorts of Provisions, and the *Portuguese* get abundance of *Elephants Teeth* and *Ambergreece*. There is a strong Current comes about the Northernmost End of *St. Laurence*, sets North West into the Bay, so that when you part from *Johanna* you must haul up N.E. and by N. till you come clear of the shoal in the Latitude of 4 deg. 10 min. South, and then you are clear of all. From whence direct your Course for *Sacatra*, which is in the Latitude of 12 deg. 20 min. North.

From the Island of *Sacatra* you had best haul off Shore E. and by S. till you have an Offing, and then E.N.E. is your Course along Shore. The Winds are variable in Showers and Squalls, but the constant Wind is between the S.S.E. and S. brisk Gales and hazy weather, the Coast shoal along way off, the I and low, and scragged Islands; the Current sets into the *Indies* very hard. The Island of *Sacatra* is high and mountainous, and very barren. From *May* to *August* continually blowing weather, that there is no riding. You anchor up on the N.W. side of the Island under a Town, about a Mile from Shore in 9 Fathom water: You may have Provisions plenty, the People are very poor, and have no great Trade. Here is Oil of *Camphire*, *Albes*, and some Gums; the People Civil with good looking after: The Ships of *Suirat* go there in the latter part of *September*, with Rice and coarse Cloth, and from thence to *Mocha*, to make a double Voyage.

From Sacatra towards the Gulf of Persia, and along the Coast of Arabia Felix, from May to September.

Sailing from *Sacatra* to the Coast of *Arabia*, you have the Winds from the South to the S.W. blowing hard, and thick weather and small drizzling Rain; the Coast is very dangerous, and shoal; there are some Islands that lie along the Coasts, but of no Trade.

When you fall in with this Coast, keep your Lead going for your Security; you have white Water 20 Leagues off Shore, and deep Bays, and shoal from Head-land to Head-land. Many Ships from the Coast of *India*, bound for *Persia*, fall in with this Coast in those Months, likewise Ships from *England*. When you are in the Latitude of 22 deg. North, you are a-breast of *Cape Roselgate*, then you may haul in, to make the high Land of *Nussett*; the Variation there is 15 deg. 16 min. Westerly. From the high Land of *Nussett* you steer for *Cape Jacques* in Latitude 25 deg. 30 min. North, then have you sight of the Land on both shores; you have Soundings from side to side. From the Cape you steer to the *Quines* N.W. and from the *Quines* to *Gomeroon*, N.N.W. till you come between *Ormus* and *Larack*, till you make the Eastermost End of *Kismis*, and then you can see the high Land over the Town; you Anchor in 16 Fath. in a large Ship, but in a small Ship you Anchor in 6 Fathom two Miles from shore. From *Gomeroon* to *Cong* is about 30 Leag. it lies from the Island *Kismis* about ten Leag. the Westward-end of the Island is shoal; you Anchor in *Cong* Road in 17 Fathom abreast of the Town, you fetch your Water a Mile from the Town. From *Cong* to *Bassora* you go in *November* and *December*, and some later; there you must keep the *Persian* shore not too close aboard, for it is shoal in several Places. When you sail from *Cong*, bound for *Bassora*, you meet with variable Winds; there is a small Island that lies upon the Entrance of the Shoals of the River *Euphrates*, called *Carak*, that all Ships touch at for a Pilot, by reason of the dangerous Sands you have to pass, before you shoot up between the two Islands, in the Entrance of the narrow of the River; in the Months aforementioned you may come from *Bassora*. You may sail for the Coast of *India*, or *Coremandel*, in *Feb. March, April*, and *May*. Those that are bound for *Surrat* and those that are bound for *Madderafapatam*, *Fort St. George*, or *Bengal*, in *April* or *May*, so that you come into *Madderaf* in *June*; those Ships that keep out from the Coast of *India*, for fear of the Monsoons breaking up, they come through the 8 degree Channel because of weathering *Ceylon*. From *Persia* to *Surrat*, from *December* to *March*, endeavour to

make *Dive-Head*, by reason of the East North East Winds, and so steer South East for the high Lands of *St. John's*, and turn up between the Shoals and the Main.

How to sail from the Coast of Coremandel, to Batavia, at divers times in the Year.

In the Month of October.

In which Time you ought to sail, to avoid the bad Weather, on the Coast of *Coremandel*, your Course is S.E. having cross'd the Equinoctial, then steer so as you may fall in with *Sumatra*, in 5 Degrees of South Latitude, if the variable Wind requires it, for the Westerly Monsoons, which are in 7 or 8 Degrees blow from *November* to *February*, and then begin to calm, and then it is better to keep under the Land of *Sumatra*, then at Sea; but the Custom of many is to run in sight of the Island *Engano*; which is high Land; and in the Latitude of 5 and a half Degrees distant, about 35 Miles West from the *Streights* of *Sunda*, and so stand right in with the Westerly Wind.

In the Month of January.

The beginning is the best time to sail, for the N.E. Wind blows on the Coast, which runs you under the Line, where you meet with the Westerly Wind, which generally blows to the Month of *March*, and then begins to vary; so that you then steer directly for the *Streights* of *Sunda*, if you can get in, in *February*; but in the Beginning of *March* you must keep the *Sumatra* shore on Board, but if it be not passed *February*, and your Ship in 5 Degrees and a half, then steer for *Engano*, and so for the *Streights*.

In the Month of February.

In sailing from the Coast you meet sometimes with southerly Winds, but coming into the Sea, as in *April* and *May*, you will have Westerly Winds; so that your Course is as before, but you must earnestly endeavour to get under the *Sumatra* shore; if it be in the latter End of *March*, and if it be a great Ship, run along the Island *Fortuna*, for to the Westward of the *Nassau* Island; at this Time you have a S.W. Wind, which commencing with the first of *April*, you may with it get up, if you keep not above 8 Miles from the shore, for it has happen'd that some who have kept the Sea, and 4 Degrees South Latitude, could not reach the Land of *Sumatra*, by Reason of the Easterly Winds, and sometimes have lain and driven 30 or 40 Days for want of Wind, and in great want of Provisions and Water: But being under the Shore in *March* and *April*, you have the Current to help you, which runs to the Southward of the *Streights* of *Sunda*.

In the Month of March.

It is a very bad Time to sail from the Coast of *Coremandel* to *Batavia*, by Reason of many Calms, therefore you must stand to the Eastward as much as the Wind will permit; and when you are past the Equator, endeavour to gain the Coast of *Sumatra* as soon as you can, where you will find Sea-Breezes and Land-Breezes, with which you may get up to the *Streights* Mouth, as was found by Experience two Years one after the other, viz. 1680, 1681.

In the Months of May, June and July.

You may sail from the said Coast to *Batavia*, but you will meet with S.E. Winds to the Southward of the Equator, which will greatly hinder you in sailing along the Coast of *Sumatra*; sometimes you will be two Months in getting to the *Streights*, and when you are come thither, you will find much Trouble to get in; but from *Coremandel* to *Fortuna*, many times your Westerly Winds will carry you clear over in 16 Days time, and if you can reach *Hog-Island*, which lies to the Northward of *Fortuna* about 16 Miles, then you may get up; but if you are not acquainted, must not venture to sail within the Islands, for there are many dangerous Rocks, as the Draughts make appear, though there be many more than in them is or can be well express'd.

In the Month of August.

You must keep the same Course as before, and turn it up along shore, as is found by long Experience; and although

though the Wind begins to be somewhat larger, yet let not that make you run higher, but you must cross the Equator (in this Time) to go under the *Sumatra* Shore; that is cross it in 117 Degrees Longitude, although you come from *Ceylon*, or else your Passage will prove long.

Your Passage against the Monsoons, is generally 1 and a half or 2 Months, but in *October* and *January* commonly it is made in 1 Month or 5 Weeks.

To sail from Batavia to the Coast of Coremandel, in the Month of April.

In the beginning of the Month, you meet sometimes with Westerly Winds, but when you get without the Straights Mouth, shape your Course to the S.W. till you are in 10 or 11 Degrees of South Latitude, and there you will meet with the S.E. Trade Wind, with which you must sail 400 Leagues, or 465 West before you part from South Latitude, and judge your self to be good 465 Leagues Westward of the Straights Mouth, observing the Variation of the Compass as Opportunity serves, and when you get about 8 Degrees or 9 Variation West, then cross the Equator in Longitude 102 or 103, and then you may stand away North for *Ceylon*, to get Sight of it; but observe that if in the Night you get Ground in 30 or 40 Fathom, and Latitude 6 Degrees North, then tack and stand to the Eastward, that you get not too far into the Bay of *Totacareen*, and you run close along the Shore by *Ceylon*, by Reason of the Westerly Winds, taking great Care that when you come near the *Abassier* or *Bassia*, which you may do in the Night time, by keeping in 20 or 23 Fathom; and so according to your Desire come upon the Coast; but if you should not run so far to the W. ward, and thinking when you are 265 or 270 Leagues to the Westward to sail directly for *Ceylon* yet it happens sometimes that you have 8 Degrees and a half Variation, for all that are set away by the N.E. Current, fall in very low with the Coast, but if not bound for *Ceylon* you may keep away the larger.

In the Months of July and August.

This is the only time for the Coast, being the time that the Easterly Winds blow to the Southward, but keep in the Latitude of 7 degrees; now you need not run away 465, or 470 Leag. to the W. ward, for in *Sept* the Currents set not so strong to the N.E. that with Ease you will get *Ceylon*; but you must always be mindful that the Winds upon the Coast in *Aug.* and *Sept.* blow much out of the S.W. so that sometimes you will have great Trouble to fetch into the Shore; in *Sept.* you may very well sail along the Coast, but stay not there till *October*.

In the Month of October.

You may sail thro' the Straights of *Pallinbam* frequently, but if late in *October*, you will meet with the N.E. Wind off from the Point of *Jebore*, which will something hinder you, but then the Tides are so strong that you may soon Tide it up to *Malacca*: The Passage to *Malacca* is generally a Month, but coming in *November* you must necessarily stay there till the 10th of *December* before you stir, and then endeavour with E. and N.E. Winds to sail thro' the *Nicombar* Islands in 8 or 9 deg. N. and from thence haul to the Northward according to the Port to which you are bound on the said Coast; but you must observe that the Current in *December* and *January* runs to the Southward; so that you must keep well to the Northward.

In the Month of December.

The Wind blowing at E. or thereabouts, you need not run so far to the Northward of your Points, and in the latter End of *Jan.* rather to the Southward of it; for in *Feb.* many times you meet with Southerly Winds under the Shore, but most times at E.S.E. In *March* it is necessary that you haul somewhat to the southward, by reason the Currents set strong to the Northward: if you are bound to *Porta Nova*, or *Tegnepatenam*, you must run close under the Head of *Atchein*, and keep that Latitude till you make *Ceylon*, or are sure you are near it, for if you haul off too soon, and coming near the Coast meet with a Southerly Wind, you will very hardly fetch the desired Port.

From Malacca to the Coast of Coremandel, in the Month of May.

You will have the Wind at W.S.W. and W. for which Reason you must keep close under the High-land of *Suma-*

tra sailing by *Atchein*, the nearer to it the better: and when you have got without the Islands, board it over; when the Wind veers to the Northward of the West, sail to the Southward, and so minding the Nature of the Wind and keeping up what you can, may chance to reach *Masulapatam*.

From Batavia to Bengal, thro' the Straights of Malacca, in October.

Which is the right time to sail from the Straights of *Malacca*, where you generally arrive in a Months time, and from thence you sail in the Month of *December*; you may sail to the Eastward of the *Andaman* Islands, not endeavouring to go to the Westward, till you have them to the Northward of you, and if you can get as far as Point *Negraes*, it is so much the better; from whence steer as much to the Northward as you can, and you will fetch in with Point *Palmiras*, or *Pipeley*; but if you sail from *Malacca* the first of *January*, you may go thro' the *Nicombar*s, and then haul away Northerly, for you will have the Wind at N.E. and E.N.E. whereby you may get a very quick Passage.

From Batavia to Bengal without Sumatra, in the Month of March.

The latter End of this Month is the fittest time, for you must run thro' the Straights of *Sunda* into 7 degrees South Latitude, and run westing 365 Leag. or thereabouts, at which time you will have the E. end of *Ceylon* North North West of you, then steer away N. till you have the Latitude of *Ceylon*, after which haul somewhat to the Westward of the N. till you get 14 or 15 deg. of Latit. then haul away more Westerly, that you may make the Coast of *Orixa*, about *Ponday* or *Jagernaut*, and then keep near the Shore, and you may sail before the Wind about Point *Palmiras*, and so to *Ballasore* or *Pipeley*. In the Month of *September*, the Freshes begin to decrease, and then the Ships may Ride before *Hughly*. In sailing from *Batavia* to *Bengal*, you must be very careful, for some Ships who would not run so far to the Westward as aforesaid, and stood away to the Northward too soon, when they thought themselves 106 Leag. or thereabouts, to the Westward of the *Andamans*, were, with the N.E. Current drove a Shore on the said Islands, one Named the — was by that means lost; and therefore it is good to run in with the Coast of *Orixa*, lest the Coast of *Arracan* should be your Land-fall. Observe also that before *Pipeley*, a S.E. and N.W. Moon makes always a full Sea; and it flows 14 feet up and down.

From Batavia to the River Arracan, in the Month of September.

Having past the Straights of *Sunda*, keep away in the Latit. of 7 deg. S. till you have about 200 Leagues Westing, then steer away N. till you are in 15 or 16 deg. N. then haul away to the Eastward for the Island *Bolongo* alias *Buglingba*, which lies at the Mouth of the River in 9 deg. 3 quarters N. and is high Land: On the other side is the Town, call'd *Zurey*, between which and the Island, you may sail thro'. In the latter End of *Sept.* and the Beginning of *October* begins the good Monsoons, for then the Westerly Winds die away, and the N.E. Wind comes moderately on; likewise the Freshes continue in their Violence, and the Water abates in the River.

From Masulapatam to Pulicat and Malacca, in the Months of April and May.

You must sail with the Westerly Winds till you get in 6 deg. N. then steer away E. to *Atchein-head*, and to pass between *Pullovay* and *Pussagomos* and *Atchein*, keeping close under the high Land of *Atchien* or *Achem* and *Sumatra*; so you will have good Anchor Ground till you come to *Pedire*, and there it is very deep, so that you must anchor very near the Shore, but you must take great care of the Gusts which come very often and sudden from the Mountains.

In July, August and September.

These two first Months you may sail as before, but in *September* you may with Westerly Winds pass to the Northward of *Atchein*, for in *October* you will have Northerly Winds and N.E. which will, by God's help, carry you to your desired Port.

In

In January and February.

You may sail for *Malacca* with the first Southerly Wind you can get, then first run along the shore as far as *Bimblapatam*, and from thence with the North East stand over for the *Andemans*, and thence run to the great and *Nicombar*s, passing by the N. End of them if possible, and so stand away for the Straights Mouth.

From Batavia to Ceylon, and thence to Surrat, from April to September.

You may sail from *Batavia* to *Ceylon* as is afore said; when you put out, let your Course be westward 350 or 400 Leag. in the Latitude of 7 deg. S. all which way you will have the Easterly winds, and then you may stand for *Ceylon*; but you must observe to cross the Equator, in the Longitude of 100 degrees and an half, least you be driven towards the Coast with the Southerly winds by the Current. Being arrived at *Ceylon* in the Beginning of *October*, and bound for *Surrat*, when you come on the Coast of *Malabar*, you will have fresh Land winds; from *September* to *April*, is there reckoned the best Time, you must run in sight of the high Land of *St. Johns*, but come no nearer than twenty Fathom, for there is foul Ground and Rocks in seventeen Fathom, which are very dangerous. A little to the Northward of this is a small Hill called *Gundiva*, which you must pass and then stand away for *Surrat*.

Sailing from Surrat to Persia, from November to January and February.

In which time you may as well come from thence as go thither, and so you may in *March*, but in *April* it is not to be done, because many times the South West Wind will hinder you from coming out of *Surrat*; but to be certain of your Voyage to *Persia*, you ought to sail in the Month of *March*, and with the North East Wind keep the Northern shore on Board as far as you can; the North East Wind sets in the latter end of *October*, the South West Winds in *May*.

From Gomberoon in Persia, to Buffaro in Euphrates, from November to February.

The Wind at North East you run between *Kismis* and *Larack* Islands, after which you will have 26 and 27 Fathom, thence as you shape your Course up the Gulph, you will see several Islands and Reefs from thence, which requires your Care in shunning them, you must sail along the Coast of *Persia* out of sight of the Low-Land, and come no nearer to the Cape *Baurdislan* than twelve Fathom: from this Cape runs a Reef, and a small matter to the westward of it lie certain Rocks, which, in keeping the twelve Fathom Tract you will avoid; from hence sail away North West till you make another Island, by which you will have 15 or 20 fath. then haul away West and West by North, till you come into eight Fathom sandy Ground, and there you may Anchor right against the Moors Motque, which stands on the Land, and from hence you may have Pilots for *Buffaro*; and then having them, you must keep close by the High Land of *Baugh*; and thence along the

shore of *Rieve*, where lies a great Reef, being Low Land and full of Trees.

From the Coast of Coremandel to the Gulph of Persia, in the Month of January.

Stand away with the North East Wind till you come in 7 degrees North Latitude, and then stand in for *Ceylon*, and when you have made Point *de Galle* alias *Gaul*, then stand North West for Cape *Comorin*, and keep along the *Malabar* shore, off and on, as the Wind will permit; for in this Easterly Monsoon you must not go off the Coast till you have reach'd *St. John's* high-Land; but coming in *March* the Monsoons are dubious, and you meet with many Calms, by reason whereof you must put out to Sea for the South West Wind in *April*, that to you may get into the Gulph before the 20th of *May*: Therefore if you sail in *February* or the beginning of *March*, from the said Coast to *Persia*, you must get off as soon as you can, for at that time the wind blows at South East and South more than at North, and though you should be driven a degree or so to the Northward, by standing North East and East North East 25 or 30 Leagues to Sea, you will find the Wind so much the larger; then take all Advantages you can in getting to the Southward, till you get 6 degrees North, then pass by *Ceylon* to the Southward, for at this time the Current sets very strong from *Ceylon* to *Coremandel* Coast: Having pass'd *Ceylon*, haul to the Westward to pass *Maldivias* Islands, running through them in 8 or 9 deg. North Latitude, standing still to the westward with the South East Wind, that you may be able, when the South West Winds comes in *April*, to fetch the Coast of *Arabia*, which you must keep close on Board till you come to the Islands of *Zoar*; and when you get to the Cape of *Musledor*, set your Course for *Ormouze* and *Larack*, North North West half West, coming no nearer than 9 or 10 Fathom Water, and thence steer North West for *Gomberoon* Road.

From Persia to the Coast of Coremandel, the right time is in March, or the beginning of April.

At which time you may Steer with the Westerly Wind South, till you get into 8 or 9 deg. North Latitude; then Steer through the *Maldivias* for Cape *Comorin*, and thence haul away for *Ceylon*, to be more certain of your Meridian distance; but if you come in *May* or *June*, and meet with bad Weather about the height of *Goa*, the Wind being large run more Southerly, but with great caution, for the Weather is very misty; but if you come from *Gomberoon* in *August*, you have N. and N.N.W. Winds, for run close by *Goa* to shun the *Baxies*, or *Russein*: You may sail on this Coast on the latter End of *August*, but in the beginning of *September* without Fear, for then the Westerly Winds haul away to the Northward, with which you may run away for *Ceylon* as you please your self, and there the Southerly Monsoon blows till the 26th of *September*, so that you may easily get to Fort *St. George*, or *Policat*, &c.

From *Poulo Panjang* to *Batavia* and *Siam*, and forward, in the Tract to *China*, and *Japan*, the Southerly or South Westerly Monsoons begin commonly in *April*, and hold till *October*; and on the contrary the Northerly, or North Easterly Monsoons blow from *October* to *April*.

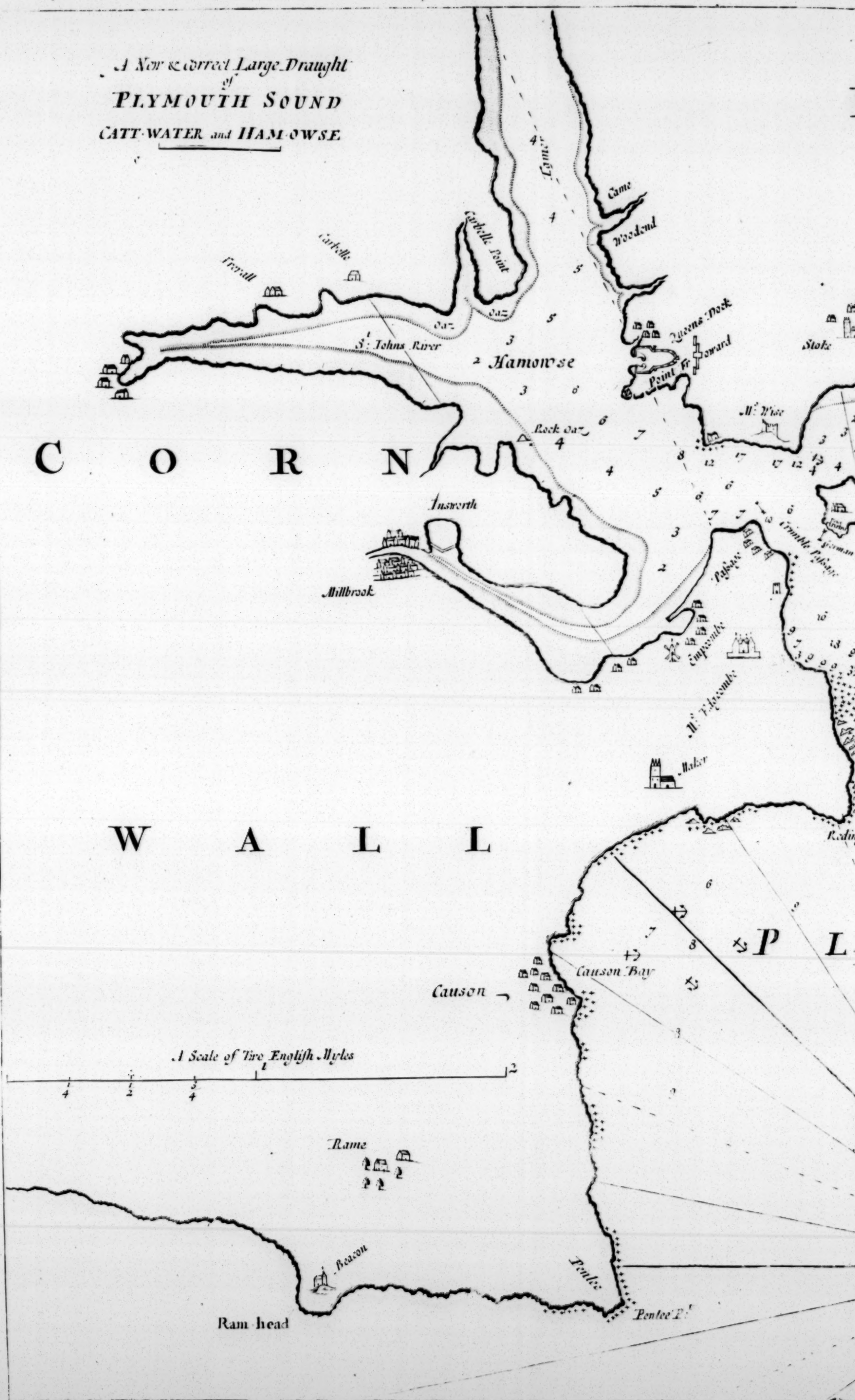
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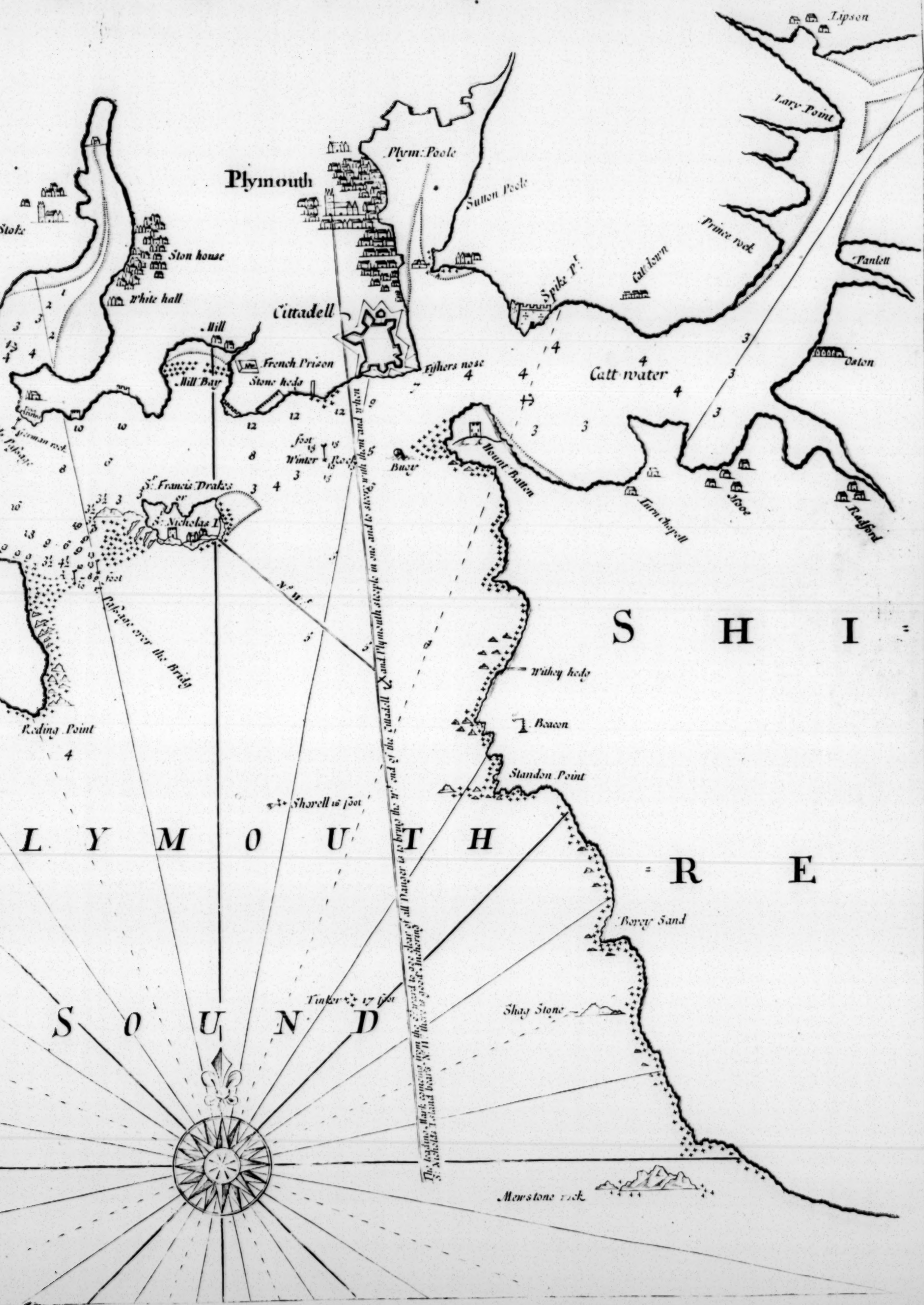
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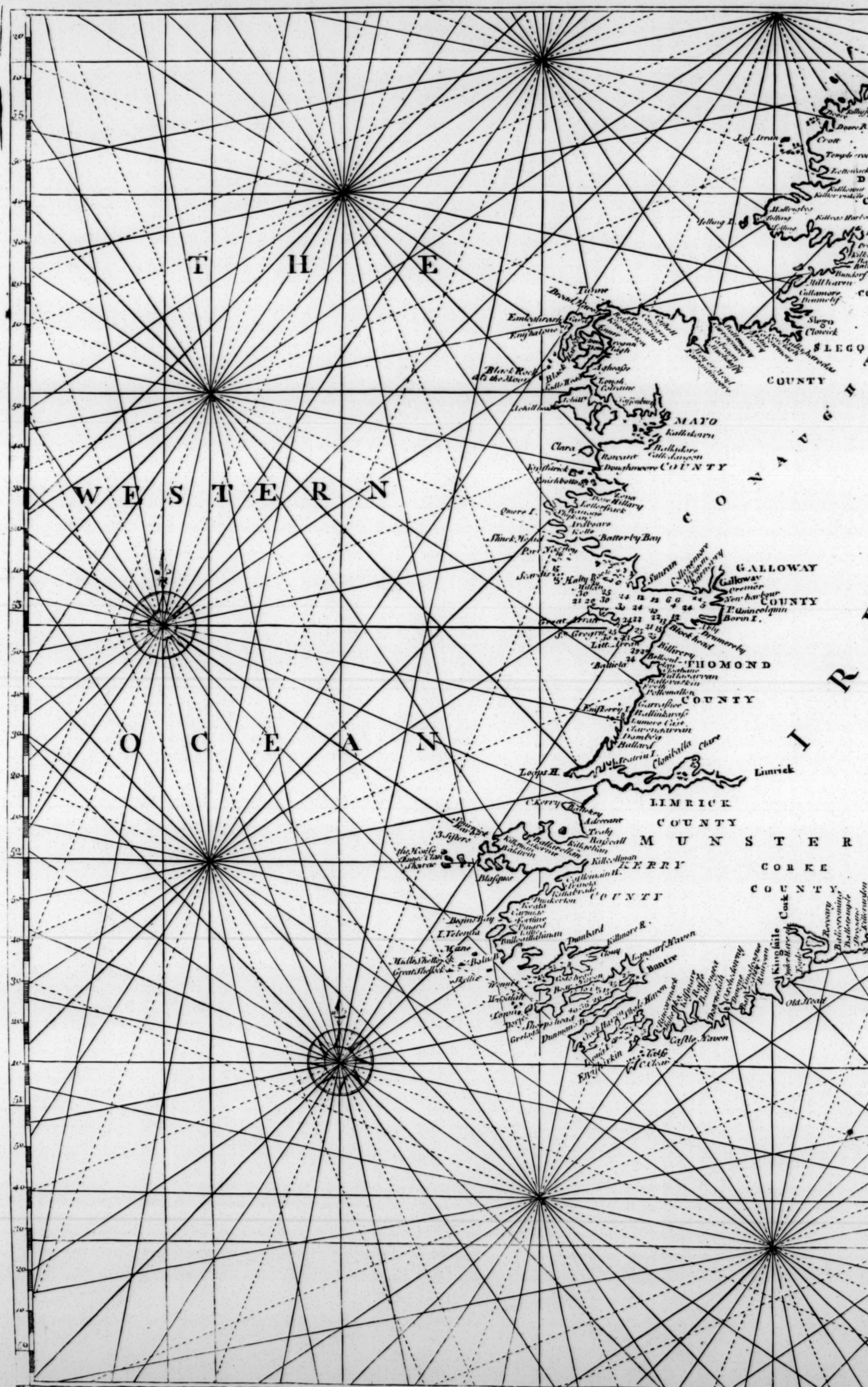
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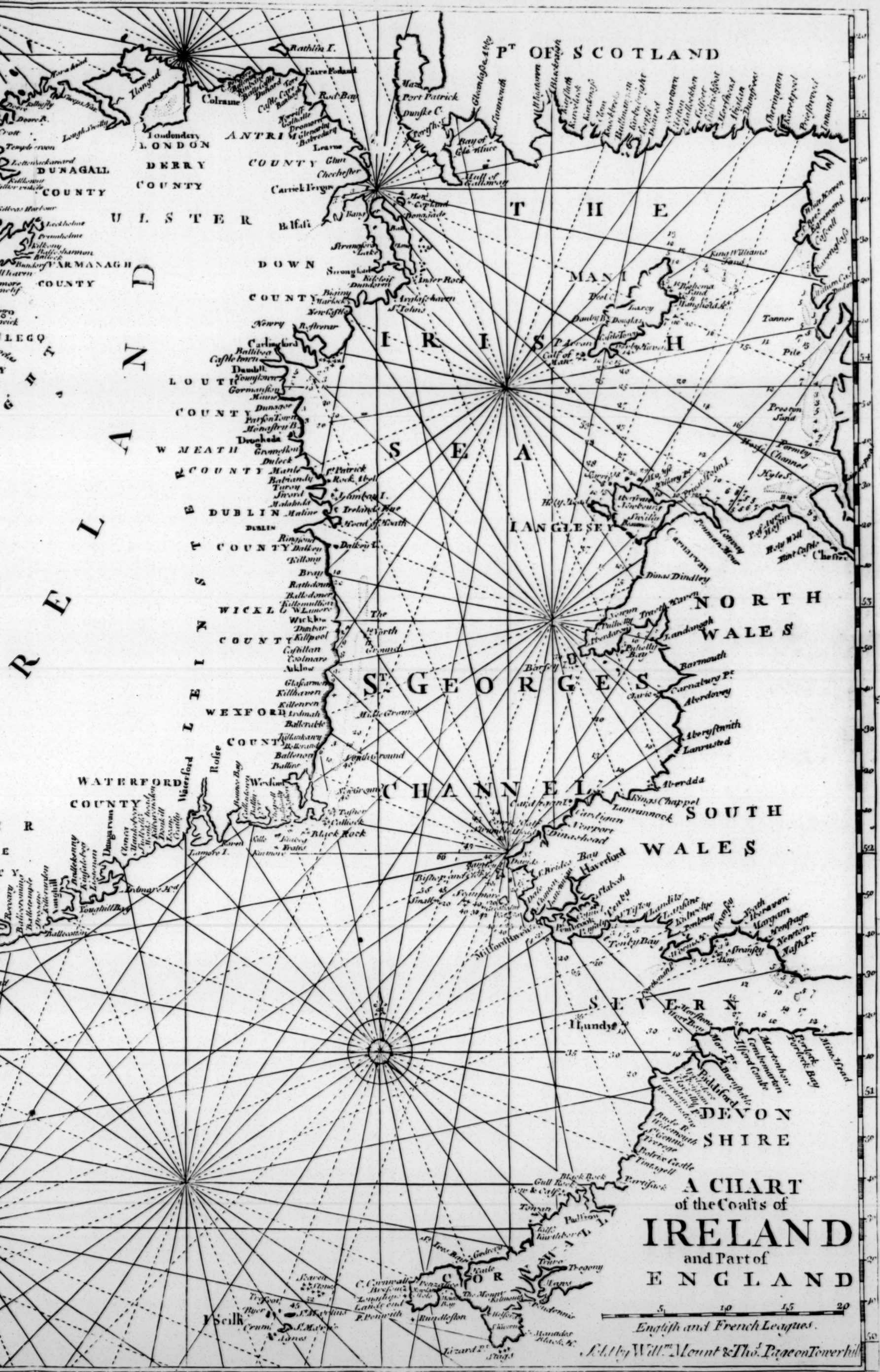
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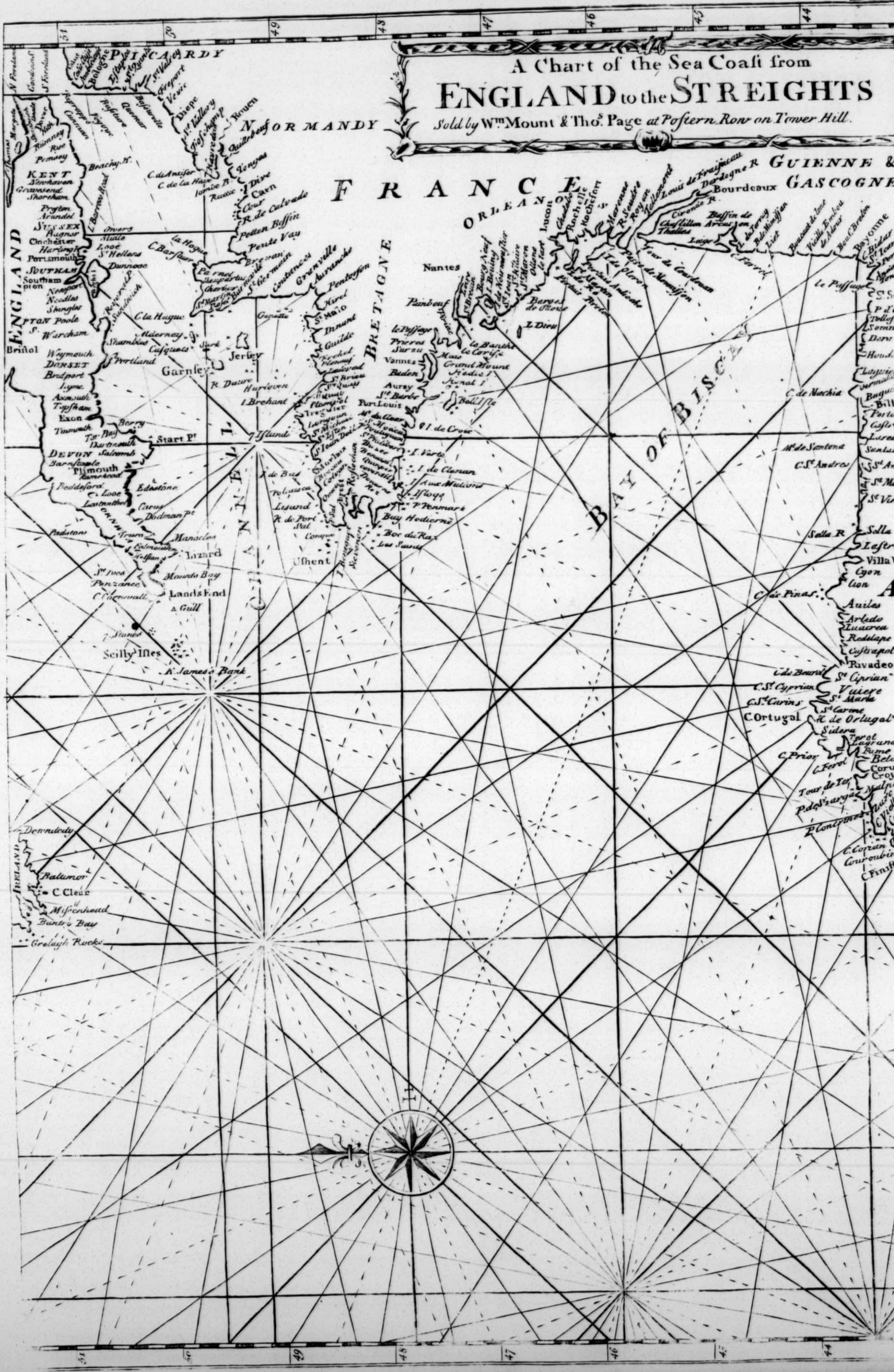


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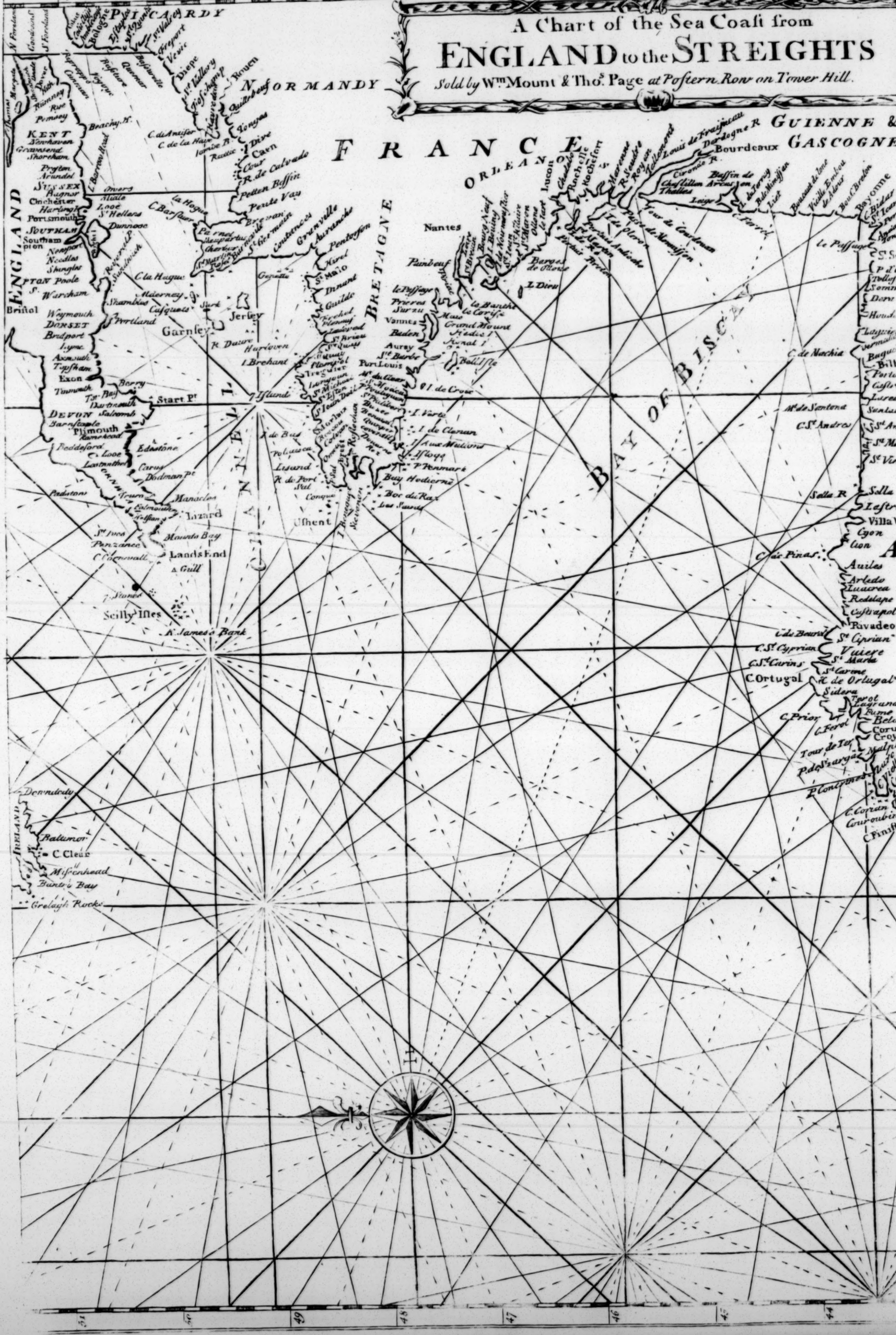








A Chart of the Sea Coast from
ENGLAND to the **STREIGHTS**
Sold by W^m Mount & Tho^s Page at Postern Row on Tower Hill.





The Second Part,

Containing Necessary Instructions for Sailing between *England* and the *East-Indies*, in the Spring and Fall.

Instructions for sailing from England to the East-Indies in the Spring.



HAVING premised the foregoing Discourse, concerning the Nature and Properties of the Winds, in the first Part of this Treatise, you may take Notice of these following Instructions for sailing into the *East-Indies*.

Instructions for shaping the Course from the Lizard.

Having passed the Channel, and taken your Departure from the *Lizard* or the *Lands-end* of *England*. (If it be possible) shape your Course South West, until you come into the Latitude of 43 degrees; and so sail about 60 or 70 Leagues without *Cape Finislerre*; and from thence you may steer away South and South by West; keeping which Course, you will sail within the Island of *Madera* and *Porto Santo*. *Madera* lying in the Latitude of 32 degrees and

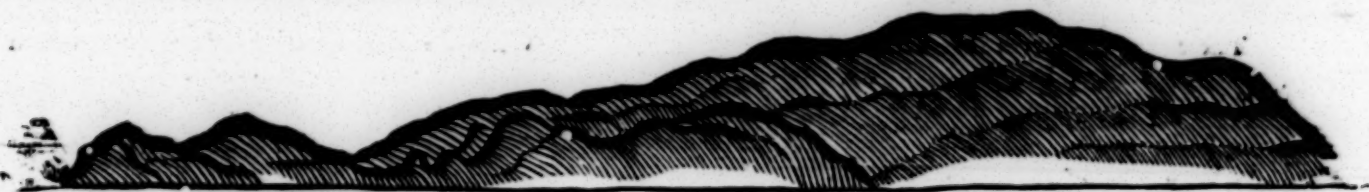
about 20 Minutes; and from thence with the same Course, you may pass between the Islands of *Grand Canaria* and *Teneriff*; or if you will, you may sail a more Westerly Course, and go to the Westward of *Teneriff*, according as the Winds happen to be.

These Instructions are to be understood, if you steer the aforesaid Courses with an open Wind; but if the Winds are contrary, then it is good to endeavour, with all the Possibility you can, to steer such Courses as may bring you in sight of the *Canaria* Islands, where the North East Trade Winds begin to blow, as was aforesaid in the first part of this Treatise of the Nature and Properties of the Winds.

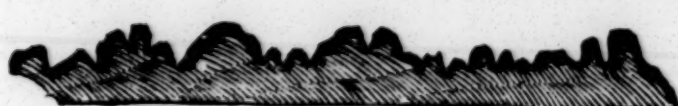
Variety of Winds causeth variety of Courses.



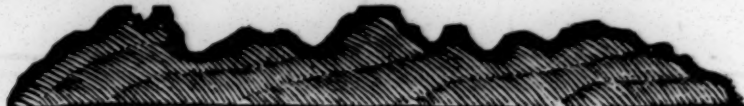
Thus sheweth the Island of *Madera*, when you come from the Northward, and that the midst of the Land is 10 or 12 Leag. from you; the S.E. is very ragged when you are near to it, the N.W. end is a steep Point going sloping down.



Thus sheweth the Island of *Madera*, being S.W. from you.



When *Madera* is South from you, it sheweth it self thus, about 16 Leagues off.



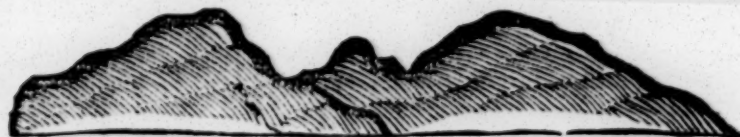
When *Madera* is W.S.W. from you it appeareth thus.



When *Porto Santo* is about South, 5 or 6 Leagues from you, it sheweth it self thus.



When *Porto Santo* is S. by W. from you, about 9 Leagues, it sheweth it self thus.



When *Palma* is about E. from you, 16 or 17 Leag. it sheweth it self thus. Hill with the Mizen



Thus sheweth the S. Coast of *Fortuventura*, when the Hill with the white Mizen is N.W. and by N. about a League from you



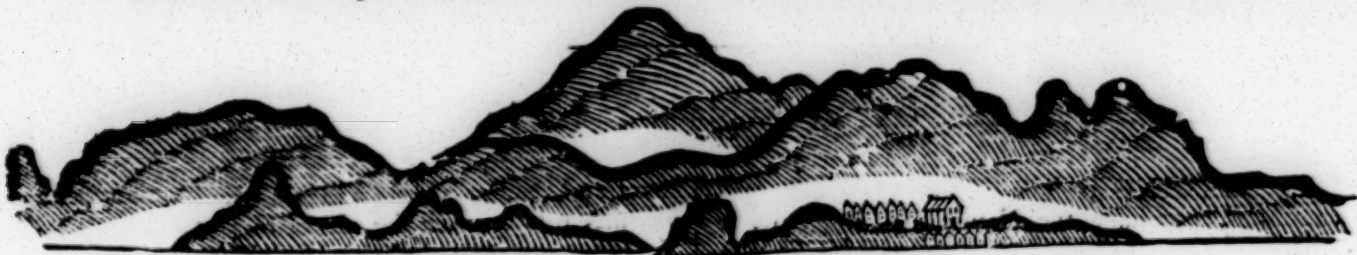
Thus sheweth the N.W. side of the *Grand Canaria*.

E

Thus



Thus sheweth *Teneriff*, when the *Pico* is WSW. and then you are open before the Road of St. Cruz.



Thus sheweth *Teneriff*, when the *Pico* is SW. from you, then are you open before the Road of *Garrichica*.



Thus sheweth the Island *Palma*, being S. and S. by E. 9 or 10 Leagues from you.



Thus sheweth the Island *Palma*, being SW. by S. 4 or 5 Leagues from you.



The *Salvages* sheweth thus when it beareth ESE. 5 Leagues from you.



When the *Salvages* are ENE. 5 Leagues from you, it sheweth it self thus.

Courses and Distances.

From the West Point of <i>Fortuventura</i> , to the Island of the <i>Grand Canaries</i> , E. and W. 19 or 20 Leagues.	
From the North Point of the <i>Canaries</i> , to <i>Punto de Nago</i> , (the North East Point of <i>Teneriff</i>) WNW. 21 Leagues.	
From <i>Punto de Nago</i> , to <i>Garrichica</i> , WSW. and SW. by W. 8 or 9 Leag.	
From <i>Teneriff</i> to <i>Isle de Palma</i> , WNW. 20 Leag.	
From the W. end of <i>Teneriff</i> to <i>Gomera</i> , W. 5 Leag.	
From <i>Palma</i> to <i>Ferro</i> , S. by W. 13 Leag.	
From <i>Grand Canaries</i> to <i>Salvages</i> , NNW. 40 Leag.	
From <i>Garrichica</i> to <i>Salvages</i> , NNE. 29 or 30 Leag.	
From <i>Teneriff</i> to <i>Madera</i> , N. 72 Leag.	
From <i>Grand Canaries</i> , to the East-end of <i>Madera</i> , N. by W. 85 Leag.	
From <i>Palma</i> to <i>Madera</i> , N. by E. 53 Leag.	
From <i>Salvages</i> to the <i>Sertors</i> of <i>Madera</i> , N. 43 Leag.	
The uttermost of the <i>Sertors</i> lieth from <i>Madera</i> 4 Leag.	
From the <i>Lizard</i> to <i>Teneriff</i> , SSW. 370 Leag.	
The Island of <i>Madera</i> lieth from <i>Porto Santo</i> , SW. 12 Leag.	

Three small Rocky Islands called the Sertors.

Madera. Southwards from the East Point of *Madera*, lieth three small Rocky Islands, called the *Sertors*; the Northernmost is the smallest, and lieth about a League from the aforesaid Point; the Southernmost is the largest, and lieth 4 Leagues from the Land: if you come from the Northward, or from *Porto Santo*, you may sail through between them and the Land; the Passage is broad and very clean and clear, only at the aforesaid East Point of *Madera*, lieth a sunken Rock, of which you must take heed.

Salvages. Between *Madera* and *Teneriff*, lieth the little Island *Salvages*, South from the *Sertors* 40 Leagues, North from the North East Point of *Teneriff* 27 Leagues, NNW. from the North East Point of the *Grand Canaries*, 40 or

42 Leagues; it lieth South West and North East, and is about a Mile and a half long: The South West end of the *Salvages* is foul far off into the Sea, therefore run rather about to the Eastward of it than the Westward; three or four Leagues from that Point, among other Rocks lieth one great Rock, which shews at a great distance like a Sail.

The chiefest of the *Canary* Islands are seven in Number, *Canary* as *Lancerota*, *Fortuventura*, *Grand Canaries*, *Teneriff*, *Islands.* *Gomera*, *Ferro*, and *Palma*. At the *Canary* Islands, a S.W. and N.E. Moon makes high Water.

Here I think proper to advise you of a Danger that hath been lately discover'd, and sent to me to insert in my Draughts, and Descriptions, which I will give you in the same Words as they came to me.

Sept. 3d, 1697. At two of the Clock in the Afternoon "came up with a Long Boat, which belonged to the " *Jofyna* of *Flushing*, bound for the *Spanish West-Indies*, " (the Captain's Name was *Peter Menne*, the Mate *Cornelius Cant*) being a Ship of 20 Guns, and 48 Men; " they struck on a Rock in the Latitude of 31 deg. 25 " min. North, Distance from the *Madera* 110 Leagues " W. and broke all their Fore-Foot, and their Ship sunk " in two Hours after, 30 Men were drowned with the " Ship: I took aboard 16 of them in the Long Boat in " the Latitude of 20 deg. 2 min. North, 50 Leagues West " from the Main; they were 15 Days in their Passage, " and almost starved; took on Board by me *Thomas Gentle*, " Commander of the *William* and *Mary*".

From the Canary Islands to Cape de Verde Islands, and thence to the Southward.

Going with the North East Trade-wind from the *Canary* *NE Trade* *Wind.* *ries* to *Cape de Verde* Islands, you must endeavour to get sight of them and make them, and so you may further continue your Course from the said Islands South and by East, till you meet with the variable Winds.

Thus sheweth the Land of Cape de Verde.



When *Cape de Verde* beareth SSE. 17 Miles distant, the Southernmost End maketh with two round Hummocks, being high Land up in the Country; off of the low Point, being the Northernmost Point, there lieth several Rocks noted with the Letter A. This Northernmost End is full of Trees. About the middle of the Land it maketh like a white sandy Beach.

And

And you should be very careful that with the Variable-
nells of the Winds the Ship does not go too far, either to the
Eastward or Westward, but that you may pass the Equinoctial
with the best Conveniency: You may receive further In-
formation from the annexed Chart, (which goeth from the
Land's-End of England to *Cape Bona Esperance*;) that
there are in the Chart, the Letters A. B. C. D. E. F. G.

The Point A at 11 deg. 30 min. North Latitude 80
Leag. South West from *Cape de Verde* reckoning *Cape de
Verde* to lie in the Latitude of 14 deg. 30 min.

The Point B at 7 degrees North Latitude 110 Leagues
West by South from *Sierra Leone*.

The Point C in the Equinoctial Line South from *Cape
Mount*.

The Point D in the Equinoctial Line 150 Leagues to
the Eastward of the Islands *Penedo de St. Paulo* or *Vigia*.

The Point E at 11 deg. 30 min. of North Latitude South
from the Island *Brava* (one of the *Cape de Verde* Islands.)

There is a Line drawn from the Point A to the Point B,
another from B to C; and also from the Point E to the
Point D.

Besides the aforesaid Points and Lines, somewhat more
than 50 Leagues to the Eastward from the Point D in the
Equinoctial Line, where is marked the Point G, out of
which is drawn a Line falling upon the Line E. D. in the
Point F. in the Latitude of 2 deg. 50 min.

Therefore you should use all possible Endeavours to cross
the Equinoctial between the Line A. B. C. and E. D. and
to go no further Eastward than the Line A. B. C. to pre-
vent your being drawn upon the Coast of *Guinea* by the
Strength of the Current, which in the Months of *June*,
July and *August*, set very strong towards that Coast.

And likewise go no further Westward than the Line
E. D. to avoid coming too near the Coast of *Brazil*, for
in *April*, *May*, *June*, *July*, and *August*, that Coast is
subject to Southerly Winds, which forceth the Current to
the Northward.

Therefore you cannot possibly pass the Equinoctial there,
if you haul too near the Coast of *Brazil*.

Therefore those Ships that shall find themselves in those
Seas in *May*, *June*, *July*, and *August*, ought not to go to
the Eastward of the said Line A. B. C. nor to the Westward
of the Line E. D. except great necessity should require it.

Yet if it should so happen, that about the Line E. D.
within two or three deg. of the Equinoctial; and if the
Wind should be about the S. E. or more Easterly, and that
according to what has been said already, it would be ne-
cessary to alter your Course and steer away S. by W. and
S. S. W. and with that Course to cross the Line. And in
Case the Wind comes to be Southerly so far that a S. S. W.
Course could not be kept, and that you cannot possibly
keep to the Eastward of the Line F. G. it would be requi-
site to alter your Course to the Eastward as much as you
can, till Opportunity presents to cross the Equinoctial to
the Eastward of D with a Southerly Wind, taking care
however, not to come to the Westward of G.

Note, Within the Latitude of 5 degrees of the Equi-
noctial, you shall meet with the Turnadoes, which are
variable Winds; then use what diligence you can to pass
the Equinoctial, for these Winds are troublesome and very
unhealthful. Take care that you are not above S. by E.
or S. S. E. from *St. Marys* (one of the *Cape de Verde* Islands)
or observing the foregoing Instructions, and to pass the Equi-
noctial in 10 degrees of West Longitude from the *Lizard*,
for going to the Eastward will be no help to you, but
spending of time; but passing the Equinoctial here, you
will neither fear the E. S. E. Current to hurt you, or the
N. W. by West Current, that sets into the *West-Indies*, but
if the Winds hinder you from passing the Equinoctial in
14 degrees West Longitude from the *Lizard*; and being
past, make your way to the Southward as fast as you can,
though the Wind be at E. or E. N. E. as many times it will
be, yet not to the Eastward of the S. by E. although you
might imagine that it would be best to go Easterly, which
if you do, you will find the Wind at S. E. and S. S. E.
which will bring you down to your South Courses again;
for your South Course would have carried you without
the Tropick in the variable Winds way, which is in 26 or 28
degrees of South Latitude; for it is a great difference when
you may sail 36 Leagues in 24 hours, and will sail but 24
Leag. in the same time close upon a Wind; for when you
have brought yourself into the variable Winds way, it will not
be long before you have a Wind to carry you to the Cape.

Between the said Lines A. B. C. and E. D. in the Chart,
being come so far, as to pass the Equinoctial between the
Point C. and the Point D. or between C. and G. at the
farthest.

And that you get the S. E. Trade-wind, it is necessary
to go away Southward with the said Winds, till you get a
Westerly Wind, and then you may steer on this Course
(with a Westerly Wind) S. E. till 36, 37, or 38 degrees
South Latitude, and then Eastward, always looking about,
and taking care if any thing might be observed that li-
therto hath been unknown.

When you depart from *Cape Bona Esperance* and sail
for *Baniam* or *Batavia*, it is convenient to sail on between
36 and 42 degrees of South Latitude Eastward, till you are
come 1000 Leagues to the Eastward of *Cape Bona Es-
perance*.

Marks to know when you are near Cape Bona Esperance.

Being come into the Latitude of 35 degrees, you will
see thick Reed Bushes driving in the Water; when you
begin to see these Reeds, then be assur'd that you are not
far from the Cape, not above 40 or 50 Leagues off; but
if you come into the aforesaid Latitude, and should not see
these Marks; it may be you may see several Fowls as large as
Ravens, with white and flat Bills, and black Feathers;
these fly not above 20 or 30 Leag. from the Cape at most,
and so other gray Fowls called *Alcatrazes* by the *Portu-
guese*; These are sure Marks for *C. Bona Esperance*, and
as far as *Cape das Aguilhas*; and when you are near this
Cape you shall also find some Fish Bones driving in the
Sea, called Scuttle Bones.

Thus by these Signs having made either of the Capes,
then keep from the Land about thirty Leagues, and if you
are bound to *Surrat*, between *St. Laurence* and the Main
of *Saffala*, then shape a North Easterly Course unto *Os
Bayos-da India*, (or the Shoals of *India*) in which way
you will find some little white Fowls fly in heaps together;
these fly about twenty Leagues from the Main unto the
Shoals of *India*; but if you see not any of these Signs,
you must then look out before you, because you are then
upon the Coast of *St. Laurence*, or upon the Banks of
Saffala; and if you see many Fowls, then you may judge
that you are not above 10 Leagues or thereabouts from the
Shoals of *India*. Then you may steer away from thence
N. E. and N. E. by N. until you come into the Latitude of
16 degrees. Being in this Latitude and seeing abundance
of Fowls called *Alcatrazes*, 6, 8, or 10 flying together, then
are you not above 10 or 15 Leagues from the Island of
St. Joan de Nova. Therefore use all diligence you can to
get from it, especially if it be a new Moon, and run N.
W. then you shall come by the Islands *Angaxos*; and the
more Northerly you go from thence, the better Course you
shall make to go by the Main of *Mosambique*, taking care
that you come no nearer the Land than 25 Fathom, be-
cause there are divers Shoals and broken Ground.

If after the beginning of *October*, you find your selves to
be about 1000 Leagues to the Eastward of the Cape and
that you would sail to the Straights of *Sunda* with the
Easterly Monsoon (which blows hardest in *December*, *Ja-
nuary*, and *February*) the Course should be made so much
Northerly, that you may be sure to fall to the Westward
of the said Straight.

In order that being come 6 deg. South Latitude, you
may make the best of your way down before the Wind to
the Straight of *Sunda*, as soon as possible you can.

But if in sailing from *Cape Bona Esperance* towards the
East, you find your self before the beginning of *October*,
or after the beginning of *March*, between the Latitude of
36 and 42 deg. about 1000 Leagues to the E. ward of *Cape
Bona Esperance*; and being delighted for the Straight of
Sunda with the Easterly Monsoon, your Course ought to
be made more Northerly than East, that being come up to
the Latitude of 36 deg. and by Estimation to be 1100
Leagues to the Eastward of *Cape Bona Esperance*; 'tis
requisite (if the Wind and Weather permit) to run into
sight of the Land of *Endracht*, or *Holandia Nova*, in the
Latitude of 27 deg. or somewhat more Northerly, so that
you may shape such a Course, that you may be sure to
prevent the falling upon the dangerous Rocks called the
Tryals, which lie near the Latitude of 20 deg. S. which
Rocks take their Name from one of our *East-India* Ships that
was lost on them, called the *Tryal*; whereby the South Coast
may be made conveniently, so that you may come before
the Wind, and fall in with the said Straight of *Sunda*.

It is also to be observed, that the Isle of *St. Paul* and
Amsterdam, which lie in about 38 deg. of South Latitude,
and by Estimation about 900 Leagues to the Eastward of
Cape Bona Esperance ought to be taken care of by a timely
looking out, that you may not run foul of it.

Here

For to
pass the
Equinoct-
ial, see
the an-
nexed
Chart.

Between
which
line Men
must cross
the Equi-
noctial,
and for
what
Reason.

How far
you must
go West-
ward and
for what
Reason.
What
Course
Ships
shall keep
in June,
July, and
August.
In what
case, and
with what
winds the
Course
must be
alter'd for
to cross
the Line.

Turna-
does.

In what
degree
the Equi-
noctial
must be
pass'd.

Variable
Wind
way

What
Course
must be
taken
with the
S. E. Trade
Wind, &c.
how long

How to
sail from
*Cape Bona
Esperance*
unto *Ban-
iam* or
Batavia.

Marks to
know
when you
are near
the Cape.

Os Bayos
da India

St. Joan
de Nova.

Angaxos.

Mosam-
bique.

Straight
of Sunda.

In what
Case the
Course
must be
made
more N.
erly than
East.

Tryals.
Dangero-
ous Rocks
called the
Tryals.

In what
Degree
the Isle of
St. Paul
lies.

Here observe well,

That the distance between Cape Bona Esperance, and the Land of *Endracht*, or *Hollandia Nova*, is really a great deal less than is made by the plain Chart, and it is possible to find the distance shorter by the running of the Currents, than in reality it is, so that the Land called *Endracht*, (or *Hollandia Nova* by the Dutch) may be sooner found than

may be expected: and the Shore to the Southward of 27 Degrees hath many dangerous Banks and craggy Grounds, whereof you ought to be very careful in looking out in time for fear of danger, and it is necessary by Night, or cloudy weather to use the Lead in time, for about 7, 6 or 5 Leag. from the Land, there is found Ground at 100, 80, or 70 fathom.

Instructions to Sail from England to the East-Indies in Autumn.

What Course must be taken from the Lizard being past the Channel.

According to the preceding Instructions of the Properties of the Winds in Part 1. for the Navigation between England and Bantam or Batavia in Autumn, it is necessary to take Notice, that when you have passed the Channel, you should, if possible, shape your Course from the Lizard or Land's-end of England, South West, until you come into the Latitude of 43 degrees, and so run about 80 Leagues without Cape Finisterre; so being in that Latitude and that distance from Cape Finisterre, sail on S. and S. by West for Madera or Porto Santo, and from thence pass with the Southerly Course between Canaria and Teneriff; or going somewhat more Westerly, run about to the Westward of Teneriff, according as the Winds fall.

The contrary wind obligeth to alter the Course

What is hereafter said is understood of a favourable Wind; but if the Wind should prove contrary, you must endeavour as far as possible, to keep such a Course as may bring you into sight of the Canaria Islands, where the North East Wind begins as we have already observed.

How to sail with the N.E. Trade-wind from the Canaria Islands

Going with the North East Trade Wind from the Canaria Islands to Cape de Verde Islands, you must also run in sight of them. And then sail from Cape de Verde Islands S. by E. till the South East and Easterly Winds begin, and with those Winds you may run to the Southward.

What Course must be taken from November to March.

Being that from the Month of November till March, about the Coast of Brazil, the Winds blow oftentimes to the Northward of the East; it is therefore thought necessary to go on with the same Wind directly South, till you get hold of the Westerly Wind, and with it go to a South East Course till you come into the Latitude of 36, 37, 38, or 40 degrees South, and from thence to the East, looking always well about, and taking care if any thing might be observed that hitherto hath not been discovered.

Having passed Cape Bona Esperance, you may sail East-

ward between 36 and 42 Degrees of South Latitude, till you come 1000 Leagues to the Eastward of the Cape, shaping your Course so much the more to the Northward of the East, that being come to the Latitude of 30 Degrees, supposing your selves by Estimation, to be about 1100 Leagues, or thereabouts, to the Eastward of the Cape; and supposing your selves to be at that distance to the Eastward of Cape Bona Esperance (if Wind and Weather permit) to run in sight of the Land of *Endracht*, or *Hollandia Nova*, (which is usual with the Dutch, but not with the English) in the Latitude of 27 degrees, or more Northerly, to observe such a Course that you may be sure to avoid the Rocks called the *Tryals*, lying about the Latitude of 20 degrees South, so that you may make the South Coast of Java, and so sail to the windward of the Streight of Sunda, and fall in with the said Streight as soon as possible.

What Course must be taken, having passed Cape Bona Esperance, to avoid the Tryals

This is to be understood of the time when the Easterly Monsoon bloweth to the Southward of the Line, and being at that aforesaid distance of eleven hundred Leagues to the Eastward of Cape Bona Esperance, between the beginning of March and the end of September; but in time when the Westerly Monsoon bloweth to the Southward of the Line, which bloweth hardest in December, January and February, between the aforesaid Latitude of 36 or 40 degrees, being come about 1000 Leagues to the Eastward of Cape Bona Esperance, the Course ought to be made to much more Northerly than East, that you may fall in therewith as soon as possible you can.

The Easterly and Westerly Monsoons cause variety of Courses.

It is to be observ'd, That the Island St. Paul and Amsterdam, lieth in about 38 degrees of South Latitude, and according to common Estimation, about 920 Leagues to the Eastward of Cape Bona Esperance, which ought to be considered, that you may look out betimes that you fall not upon it unawares.

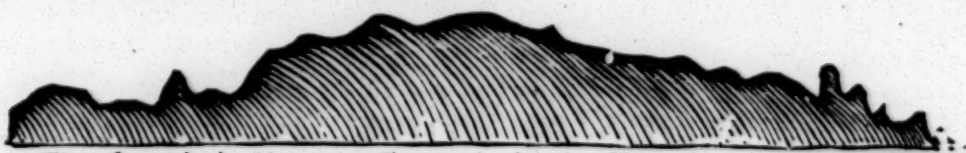
St. Paul and Amsterdam.



Thus sheweth the Islands, or Rocks of *Martinvas*, bearing West about 4 Leagues off.

These Islands, or rather Rocks of *Martinvas*, are three in Number, they lie nearest North and South: only the Northernmost, which is a very small Rock, is something

more Westerly, and are not above a Mile in length; they are no better than Rocks, and no way accessible.



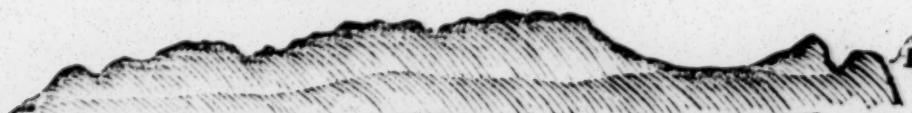
Thus sheweth the Islands of *Trinadada*, bearing West about 4 Leagues off.

The Body of the Island of *Trinadada*, lies in the Latitude of 20 deg. 27 min. South, and in Longitude from the Lizard, 24, 30 West. You may Anchor on the West side of the Island, about a Mile from the Shore, where you have gradual Soundings; here you have Water, but it is difficult to get it into your Boat, by reason the Shore is Rocky, which will endanger the staving of your Cask.

This Island is about five Miles long, stretching it self about N.W. and S.E. the North Point being in 20 deg. 25 min. South Latitude, and the South part 20 deg. 29 min.

The N. and W. part is nothing but steep Rocks, scarce Accessible, the Island *Trinadada* lies about 8 or 9 leagues from *Martinvas*; we moored in 18 fath. on the West-side of the Island, the North part bearing East North East, the South part South East; and a high steep Rock, like a Nine-pin, East South East. The Variation here is about 6 deg. 30 min. East.

You have a Draught of this Island in a corner of the St. Helena Map.



Thus sheweth St. Helena, when the North Point A beareth NNW. about 8 Leagues off.

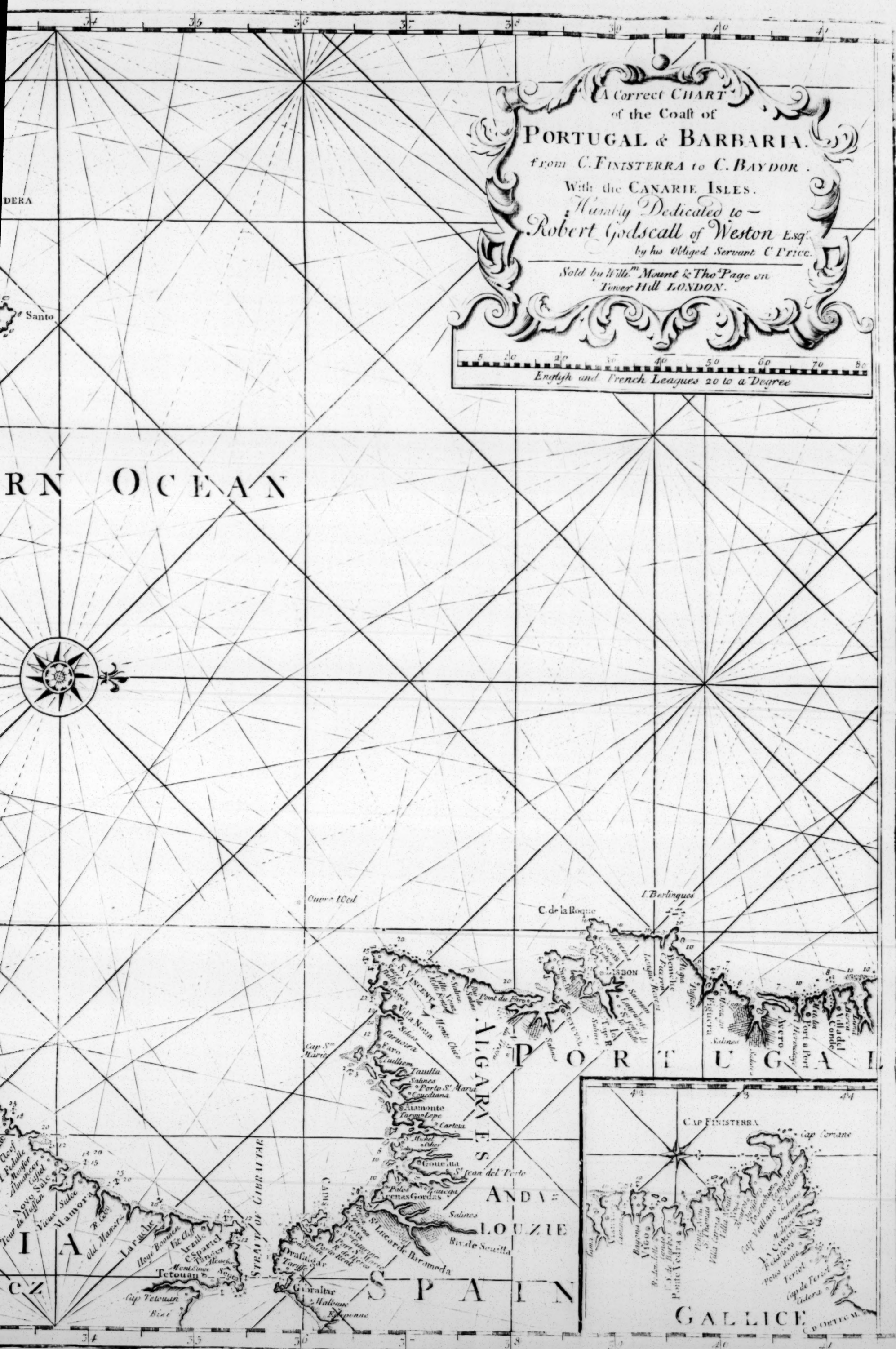
Here I think it proper to acquaint the Reader, that this Island was taken by the Dutch, in the Year 1672, and in the beginning of the Year 1673, was re-taken by the prudent Conduct of that Valiant Commander, Sir Richard Munday, in his Majesty's Ship Assistance, having under his Command the *Levant*, the *Mary* and *Martha*, and the *Castle Fire-Ship*, &c.

Thus

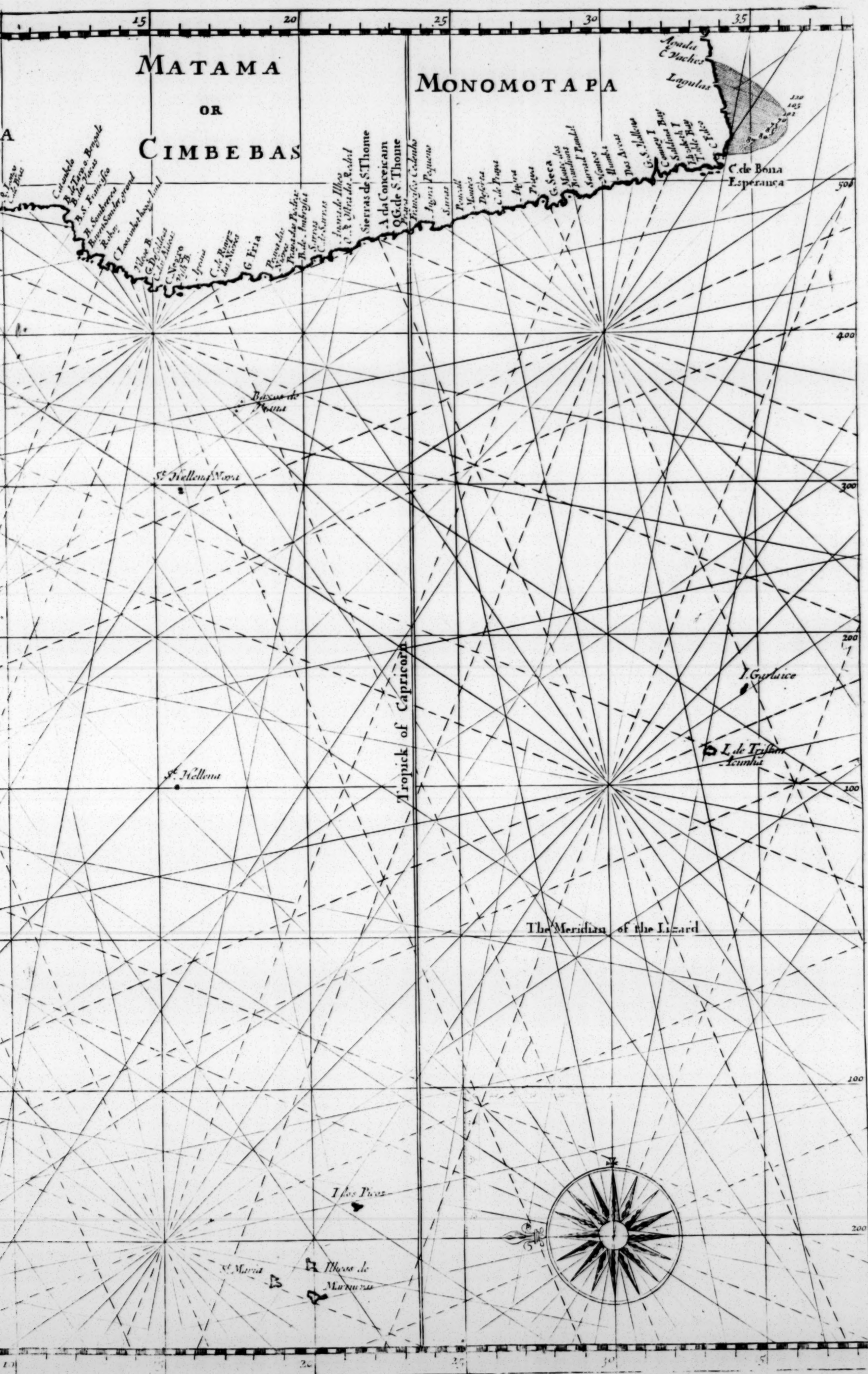
Map Room Cut

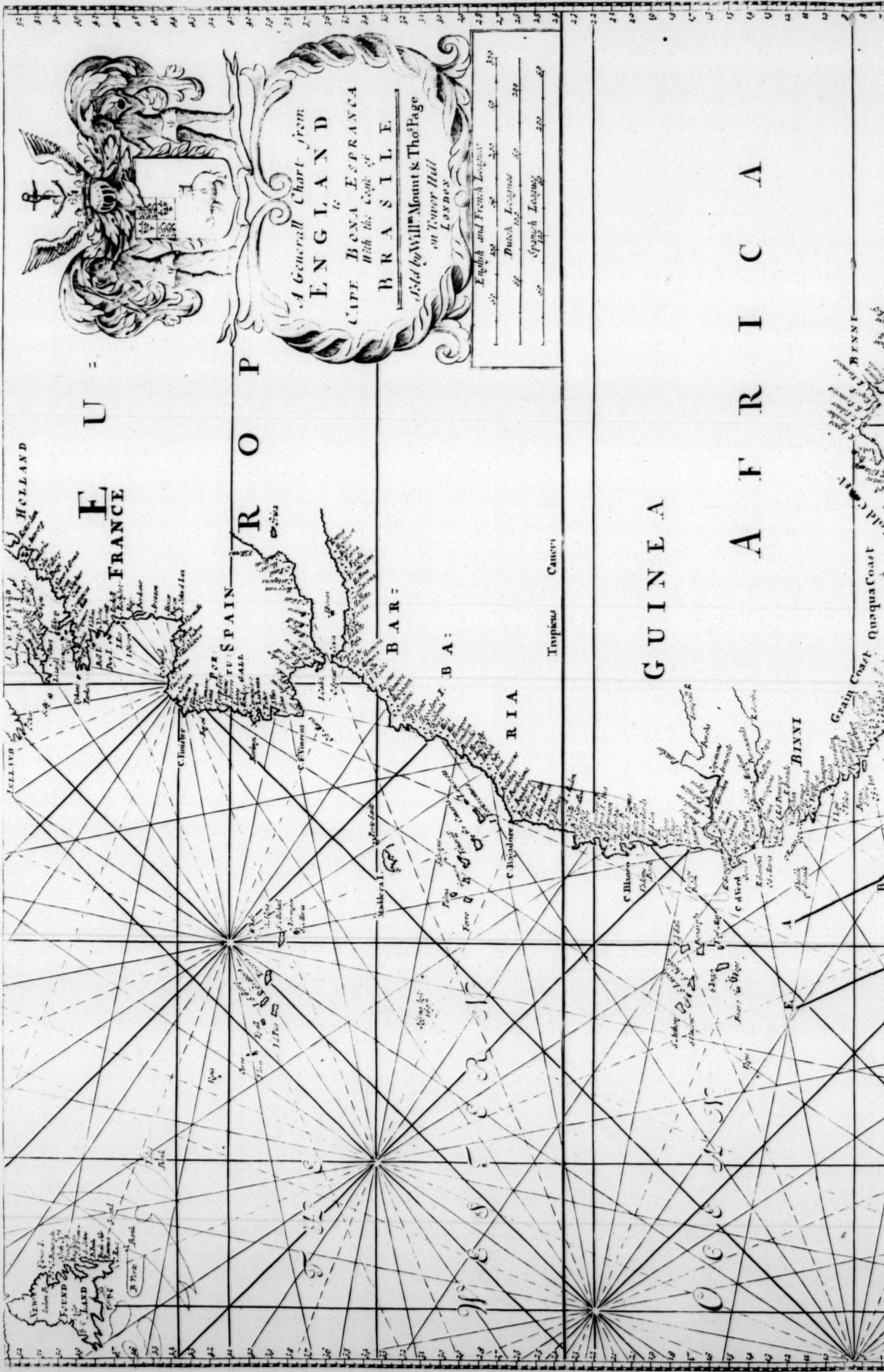
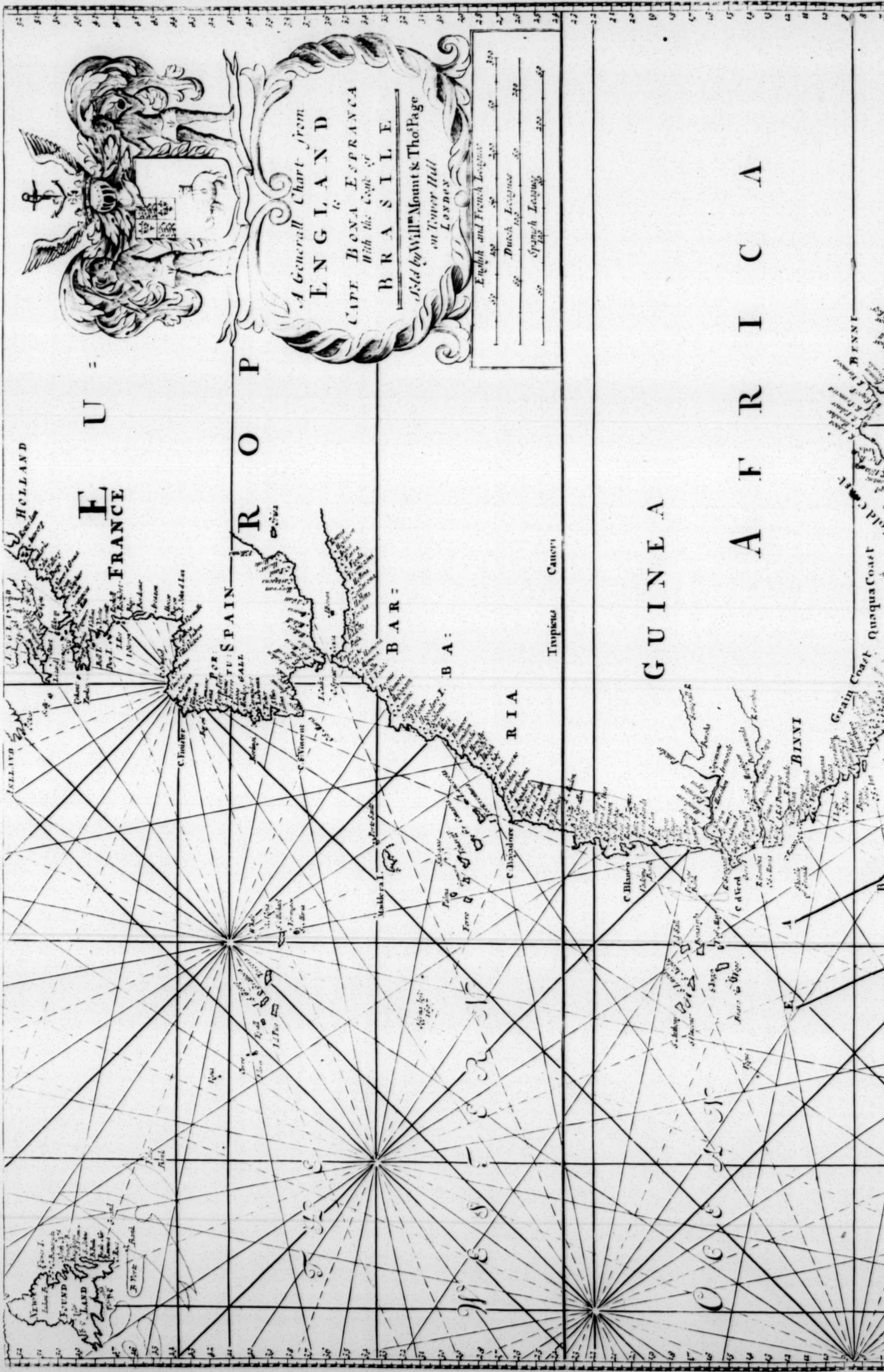
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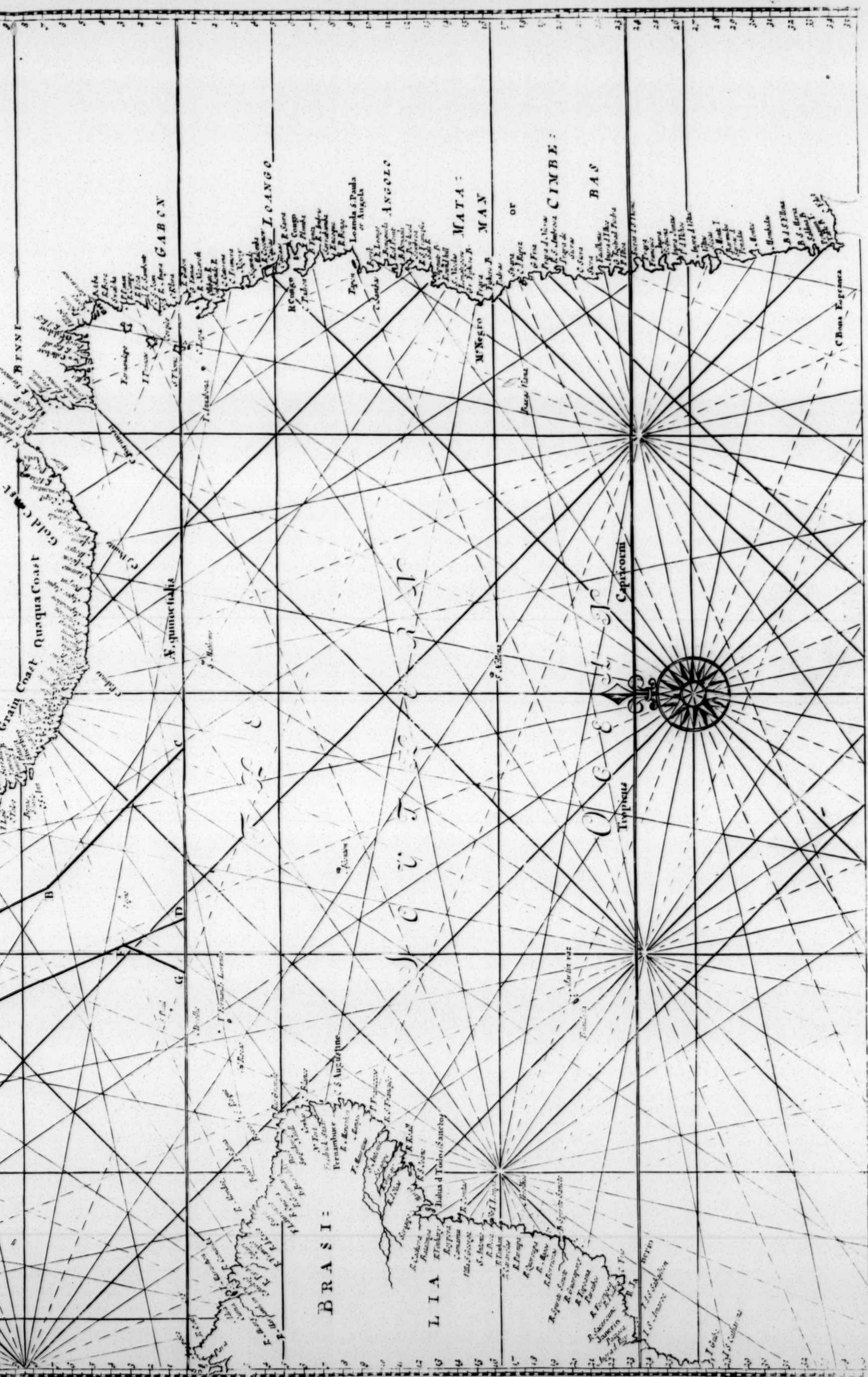


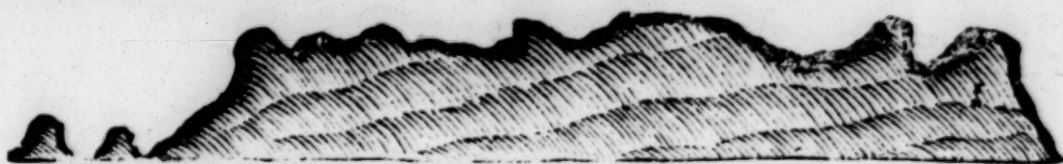












Thus sheweth St. Helena, when the two little Islands bear W. half Southerly, and the Point B. WNW.

To touch at St. Helena. St. Helena lieth in 16 degrees of South Latitude, and 1 deg. 00 min. of West Longitude from the Lizard: If you would touch at St. Helena, keep in the Latitude of 15 deg. 50 min. and you cannot miss it Night nor Day; the Land is high, and coming from the Cape there is no Current to deceive you. The South East Wind will take you in 30 Degrees of South Latitude, and will carry you to the Northward of the Equinoctial.

Instructions to Sail into St. Helena Road.

The Road of St. Helena is on the North West side of the Island; to Sail into which, and to Anchor, take the following Directions.

Ascension Island lieth in 7 deg. 50 min. South Latit. and in 9 deg. 00 min. of W. Longit. from the Lizard.



Thus sheweth the Island of Ascension, when you are on the West-side thereof 30 Miles distant, the Body of the Island bearing West by North half Northerly.

Ascension lieth in the Latitude of 7 deg. 55 min. Longitude from the Lizard, 9 deg. 00 min. W. The Anchoring place is on the NW. side of the Island, where you Ride in 12 or 13 fath. Water, about 2 or 3 Cable's length from the shore. You have 7 Fathom within a Cable's length of the shore: The Bay is about half a Mile deep, and about half a Mile wide; the Westermost Point is dangerous, there running a Reef from it about a Mile from shore, on which sometimes it doth not break; the Landing place is in the bottom of the Bay, on the East-side, on a small Rocky Point, on which sometimes, it is very dangerous Landing. This Bay may be known by a small Hill standing in itself, called *Croft Hill*, there being a Croft on it; there are Hills in other parts of the Island, but then they do not stand by themselves: You run in directly with this Hill, and Anchor as before, about half a Mile from the shore. On the East-side of *Croft-Hill* the Land is level, and then for about sixty or seventy Paces the Land is pretty steep, and then about two Miles and a half the Land riseth with a small Ascent, which brings you to the foot of a Ridge of Hills, which when you are at the top, shew almost circular. At the foot of these Hills is a Well of Water: Here are a great many Goats.

A Description of the Island Tristan de Cunha.

Tristan de Cunha lies in the Latitude of 37 deg. 7 min. South, and Longitude from the Lizard about 10 deg. and a half West. This Island is steep too, about half a Mile from the shore 13 and 14 Fathom, and so decreasing gradually to three Fathom close to the shore; there is no Shoal nor broken Ground lying off it, except a small matter off the Points. It is very difficult getting a shore here with a Boat in some places, for near to the shore there is large bodied Trees growing under Water, the Tops of which lie almost even with the Surface, so that in going a-shore you are forced to row in and out amongst the Boughs. About a Pistols shot from the shore-side there is fresh Water to be had, but the way is very stony, so that you cannot well get it on Board without rowling on Boards, or handing it. There you will find abundance of Seals, some of them very large, which you may cut down with an Ax, for they will not resist you. Here is abundance of Drift-Wood; and several small Springs amongst the Rocks: In some places you may easily Land. Here is neither Goats nor Hogs, nor, by Report, no other Creature but these Seals, except a strange sort of a Bird which goes upright.

Note; That three quarters of a Mile off this Island there is no Ground with 100 Fathom Line.

You must keep *Sugar-loaf-Point* close on Board, so near that you may cast a Bisket on Shore. On the lower, or Westermost part of this said Point, stands a small Fort of two or three Guns, which you must be sure to keep close on Board: The Valley which you will then see, is called *Rupert's-Valley*, in which there is a good Line of Guns, and a small red House. And the next Point of high Land is called *Mundaye Point*, on the Top of which stands a small Fortification; this Point also must be kept close on board: The next Valley being the place of Anchoring, is called *Chappel*, or *James Valley*, and bring the Flag-staff S.S.E. (or South East is the best) and you may Anchor in 8, 10, or 15 Fathom.

To go into Table-Bay.

Keep in the Latitude of 33 deg. 40 min. or thereabouts, and you will fall in with the North Part of Cape *Bona Esperance*, where you shall see the Table Mountain look above all the rest of the Land; you may steer in with the Table till you shall see a small low Island called *Penguin Island*, with a House upon it with *Dutch Colours*; but keep nearer the Main than the Island, for there are sunken Rocks lie upon it. Keep your Lead going, you may be bold to go in sixteen Fathom Water; in the Road you may ride in five or six Fathom, if you bring the Table to bear SSW. and the Sugar-Loaf SW. half W. you may ride very well, as you may more plainly see in the large Draught of Cape *Bona Esperance*.

There is another Island called *Coney Island*, bearing N. NW. from *Penguin Island*; this Island hath foul Ground about it, and to Seawards on the West-side, hath a dangerous Ledge of Rocks; you may go boldly between the Island and the Main; near the Shore is no Danger but what you see.

Chapman's-Chace is a very good Harbour, and lieth in the Latitude of 34 deg. 10 min. lying within the South West Point, under a little Hillock close by the Shore on the SSW. side like a Table, lying in the Bottom of the Bay; there is good Ground, and good Depths in this Harbour, as 10, 9, 8, 7, 6, 5 Fathom.

Cape *Falso* lieth in 34 deg. 30 min. of South Latitude, and is distant from Cape *Bona Esperance* nine Leagues E.S.E. Between these two Capes is a deep Bay, and before it lies a Rock even with the Water, and lieth nearest to Cape *Bona Esperance*; in this Bay is the great River *Dolfe*, where is good Refreshing.

From Cape *Bona Esperance* to Cape *das Aguilhas*, the Land lieth E.S.E. distant 26 Leagues, and no Danger to be seen but a bold Shore, and so all along; sixty Leagues to the Eastward of Cape *das Aguilhas*, is low Land, but there is a high Land to the Eastward of the low Land, and you have Ground 7 or 8 Leagues from the Shore.

An hundred Leagues to the Eastward of this Cape, at 70, 65, 60, 50, or 40 Fathom, you will have sandy black Ground, which will help you much in coming home: If you cannot have an Observation to find the Latitude, when you are to the Westward of this Cape, you shall have clear and deep Water, which may be a help to you, in dark Weather, to find and to make Cape *Bona Esperance*.



Thus sheweth Cape Bona Esperance, when the Table bears N. half Easterly from you 9 Leagues off.



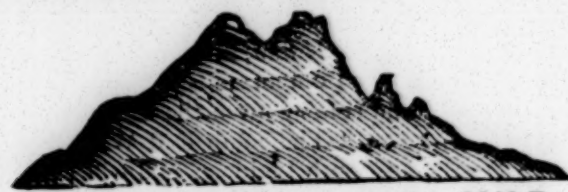
Thus sheweth Cape Bona Esperance, when the Table bears N. by E. 8 Leagues off.



Thus sheweth Cape Falso, bearing East by North ten Leagues off.



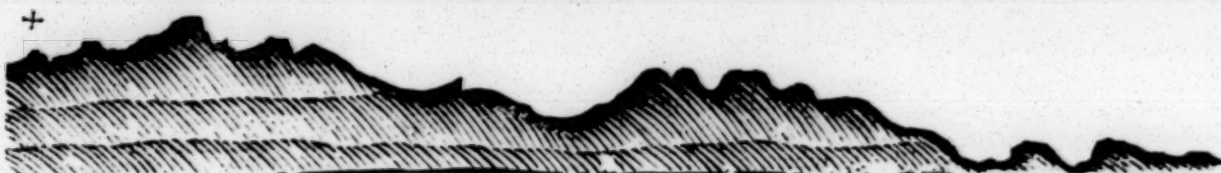
When Cape Bona Esperance bears N. of you, it shews it self thus, distant about 16 Leagues.



Thus shews Cape das Aguilhas, N.N.E. 18 Leagues off.



The Southermost Head of Saldina-bay.

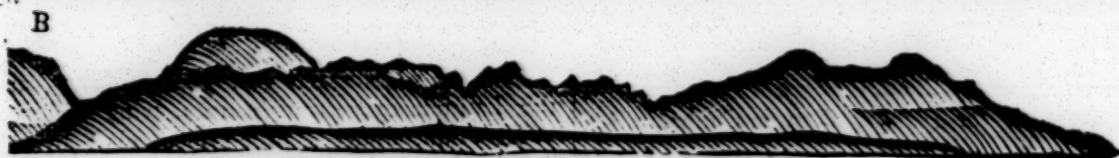
Saldina-
Bay.

In these two Prospects is shewed the Appearance of the Southermost Head of Saldina Bay, when you come out of the Bay; and it bears off you as followeth: Being distant, by Estimation, 5 Leagues off to the Westward of the Eastermost Point next the Bay, South East, and the Sugar-loaf shut in with the Table South East by East, the

middle of the Head South East by East, and the Southermost end being three Hommock S.S.E. a quarter South; also you may see the Northermost Land bearing off you N.N.E. and North East by East, distant about 8 Leagues off. A. King James's Mount. B. The Table. C. The Sugar-loaf. The Croffes are to come together.



Thus sheweth Cape de Aguilhas, bearing N.W. by N. distant four Leagues.



In these Prospects sheweth the Land of Cape Bona Esperance.

Cape Bona
Esperance.

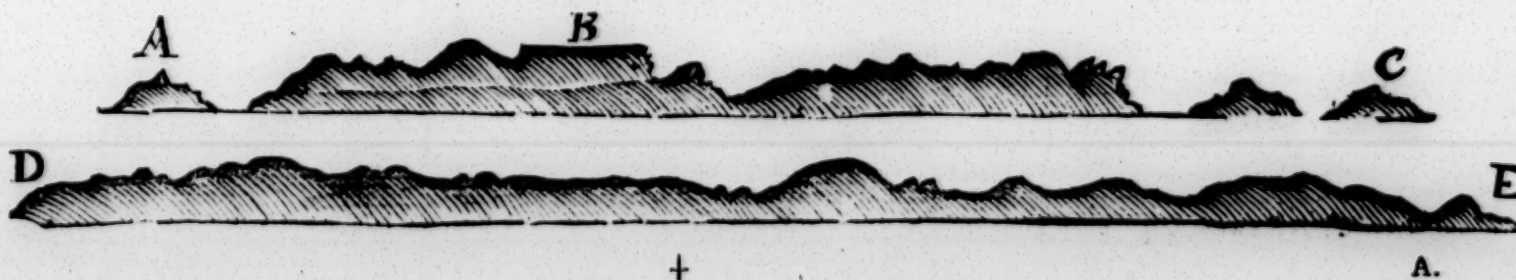
Coming from the Southward, being distant from Cape Bona Esperance about twenty Miles, and it bears off you S.E. by S. being distant from the Land about 8 Miles, you shall have the Sugar-loaf A almost open, and it will bear off you NE. half N. distant about eight Miles; the Table C. also being seen over the Hill, having the Southermost end thereof NE. half East; the next round Hill E.N.E. and a high round Hill up in the Country, E. half S. and the terraced Land E.S.E. with fine champion Land from the high round Hill in the Country, almost on the Cape it self close by the Sea-side. At BB the Lands are to joyn.

To come to an Anchor at Cape Bona Esperance.

If you cannot weather the Breakers that lie to the S.E.

of Penguin Island, you may go between the Island and the Main; but you will have no Ground, till you come within half a Mile of the N.E. end of Penguin Island, and then you have gradual Soundings at 17, 16, 14, 12 fathom, very rocky Ground, keep the Island as close aboard as you think fit, the shoalest Water is 9 Fathom, which is a good Birth off, and when you have the Flag-staff on the Hill W.N.W. you will have 8 and 7 Fathom gruff course Sand, where you may anchor with safety: If you cannot get in, but when you get in you anchor in 13 Fathom gruff gravelly Ground. Charles Mount, bearing S. half W. the Table from the S. by W. to the S.S.W. half W. Sugar-Loaf-Hill S.W. by S. Penguin Island from N.W. half N. to N. by W. half W. four Miles off.

The Land of Cape Bona Esperance.



A. The Land appearing to the Northwards of the Table, bearing North half West. B. The Table bearing North, three quarters East. C. Cape *Bona Esperance*, bearing North by East a quarter East, eight Leagues off. D. The Land in the Bay between Cape *Falso*, and Cape *Bona Esperance*. E. The Land about Cape *Falso*, bearing North East by East about a League off. Now Cape *Falso* makes like a Gunner's Quine, but there is Land to the Eastward; between Cape *Falso* and Cape *das Aguilhas*, which makes like a Quine also, but it is a great deal bigger than that of Cape *Falso*. Cape *Falso*, and Cape *Bona Esperance* lie East and West, near about 8 Leagues.

Now the Cape *de das Aguilhas*, lies from Cape *Bona Esperance*, nearest E.S.E. and from thence to the Eastward about thirty Leagues, the Land lies near E.N.E. and from thence to Cape *Formosa*, it lies nearest East and West; you shall have Soundings in 37 Degrees, but in running to the Westwards you are presently off of them, because it is the Point of the Riff, for the Riff runs from Cape *Falso* about 40 Leag. to the Eastward of Cape *das Aguilhas*; but to the Westward of Cape *Falso* no Ground, and along Cape *Bona Esperance* no Ground, you may go within a League of the said Cape without Fear.



Thus sheweth the Land about 8 Leagues to the South East of *Saldina Bay*, distant about 5 Miles off.

Some of the *Dutch* knowing *Saldina Bay* very well, and also that the Currents sets strong to the Northward, that they cannot get to the Cape with a South Easterly Wind, bear away for this Bay.

A Description of Saldina Bay.

Saldina-bay is a very safe Place to enter, and when in, one of the best Harbours in the World; so great a plenty of Fish, that three Men may feed a whole Ship's Company, and Salt enough at the Head of the Bay to preserve a Quantity; the Water is brackish, yet such as it is, the *Dutch* Soldiers that live here have their Houses near it,

and drink no other, which *Dutch* Soldiers will privately conduct you to the Farmers Houses, and supply you with Cabbage, and what Sheep you want: Here are some Deer, great Numbers of Seals, and Coneys a few, which are only on the Island (so called from it) at the Entrance. Latitude about 33, about 20 Leagues to the Northward of the *Table-bay*.



A. The North Entrance. O. is the South Entrance.

Thus sheweth the Entrance of *Saldina Bay*, distant 4 or 5 Miles.

Going in for this Bay, steer directly for *Coney-Island*, which you may know by the rocky Hummock on it, as above, give the North entrance the best Birth, because of some Rocks lying a little way off Shore, the South is bold. Between *Coney-Island* and the South shore is a fair Pas-

sage to look at, and is, I believe good, but being narrow, and a *Dutch* Ship about three Years since going in that way, in foggy weather was lost there, I would advise none to attempt it.

Saldina-Bay.



This Draught was not Mathematically taken, but is free from any great Error, and the best Extant.

The abovementioned Directions are sufficient to carry any Ship in; for provided you leave *Coney-Island* on your Starboard-side, you cannot go amiss, we went in between the two Islands, and turned out between *Seal-Island* and the North shore, with the Wind right an end, yet I account the first Passage the best.

Designing to sail to the Southward, anchor in the North Bay, or to the Northward in the South Bay, you may lie Landlocked, in both there is no more Shoals than that in the Draught, and that breaks. I cannot but account these

Notes sufficient to the Purpose, and safely to be relied on, because from the Cape the Land is all low, next the Sea-side, until you come as far as this to the Northward.

Coming in with *Penguin Island* in the Night, if you fire two or three single Guns, they will make a Fire on the North East Point of it, if you continue to fire more, they will make another at their House, which stands about the middle of the East-side of the Island, in a little Bay, which latter bearing West South West, or the former West, in nine or ten Fathom is best anchoring.

Here Note, This Country, about the Cape, is Rich and Fruitful in her Womb. The People differ little from Brute Beasts, only in their Form, they are called *Hottentotts*: Their Colour ugly Black, strong Limb'd, desperate Crafty and Injurious; Their Heads long, their Hair crispt and woolly, without Apparel; their Noses flat, crush'd so in their Infancy; about their Neck they have Guts of raw Puddings, serving both for Food and Drefs; or otherwise they have greasy Thongs of stinking Leather; the Grand Seigniors amongst them, have better Cloathing, a nasty untanned Hide, or Skin of a *Lyon*, *Leopard*, *Calf*, *Baboon*, or *Sheep*, the Hairy side inverted put about their Shoulders, &c.

The

The Third Part,

Describing the Sea-Coasts, Capes, Headlands, Soundings, Sands, Shoals, Rocks, and Dangers. The Islands, Bays, Roads, Harbours and Ports, from Cape Bona Esperance, all over the Oriental Ocean.

The Coast between Cape Bona Esperance, and the Coast of India.

Instructions for Sailing from Cape Bona Esperance to Surrat, between the Island of Madagascar, or St. Laurence.

FROM Cape Bona Esperance, in your Course to St. Laurence, you will meet with a Current which may be shunn'd, if the Winds are favourable, if you steer East, and East by North, for the Current sets S. W. or S. W. by W. but if the Wind is contrary, the further you haul from the shore, the less Current you will meet with.

The best way to make St. Laurence, is in the Latitude of 23 deg. 24 or 30 min. by which you may shun the shoal of India, the better to direct your Course to St. Joan de Nova, where you shall meet with a Current that runs about nine Leagues in 24 hours, in Latitude 17 degrees, and so continuing to the Latitude of 16 degrees, setting to the Southward; and after very much to the Northward of St. Joan de Nova, which lieth in the Latitude of 17 deg. 20 min. then haul for Mobilia, in the Latitude of 12 deg. 20 min. South, one of the Islands of Cumaro, whose Latitude is 12 deg. 15 min. South.

The Island Succatore lieth in the Latitude of 12 deg. 40 min. North. To make which Island, you were best to make the main Land of Zeyla, in the Latitude of 9 or 10 degrees, otherwise you may be put by it.

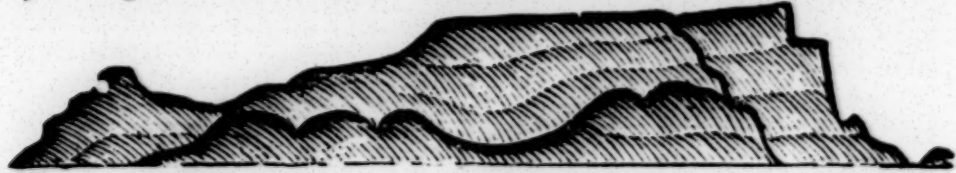
Then going for Surrat, haul in with the Coast of Persia, in 21 deg. on which Coast, when the West Monsoons are done, you shall have the Wind Northerly, and fair Weather from September till April. Now when you are off of the Coast of Diu, about 30 or 40 Leagues, the Water will change, and you shall see some sticks swimming in the Sea: Look for Diu from the Depth of 60 to 20 Fathom, whose certain Latitude is 21 deg. North.

To the Westward of Diu, you shall have the Land fair, and without Danger, but quick Tides; then steering ESE. from Diu, 12 or 18 Leagues, you come to the first Bank of Sand, where you shall not have less than six or seven Fathom, this Depth will continue three or four Miles, then you shall have 16, 17, or 18 Fath. from the Bank, 8 or 9 Leagues you shall meet with the next Bank or Shoal, where you shall have the like Shoalings as before; then 24, 20, 14, 12 or 10 Fathom hard aboard the shore; your Land-fall will be to the Southward of Demon.

To go into the Road of Mozambique.

If you desire to run into the Road of Mozambique, you must pass by the two Islands of St. George and St. Jago, leaving them on the South West-side, running somewhat off from St. George in 6 or 7 Fathom, having great Care of the Banks and Shoals of Caveceira, which you may see the Water break upon from the Island and Fortrets of Mozambique.

Amsterdam, an Island by the Island of St. Paul, lying in the Latitude of 38 deg. 00 min. and about 920 Leagues to the Eastward of the Meridian of Cape Bona Esperance.



Thus sheweth the Island Amsterdam, when it beareth NE. by N. about 20 Miles from you.

Instructions for Sailing from Cape Bona Esperance to St. Augustine's Bay, in the Island of St. Laurence.

When you depart from Cape Bona Esperance, and sail to St. Laurence, you must be very careful of your Course, for you will find very perplexing Currents, that will set you sometimes one way, and sometimes another. And in your Course to St. Laurence or Madagascar, you will meet with a Current that sets South West, or South West by West, which may be easily shunn'd if the Wind be favourable, if you can sail East, or East by North; but if the Wind be contrary, the nearer you haul into the shore, the less Current you will have.

The best way to make St. Laurence, is to keep in the Latitude of 23 deg. 24 or 30 min. where in the Year 1709 the Variation was found to be 22 deg. 40 min. West. And if you would go into St. Augustine's Bay, which lieth in the Latitude of 23 deg. 36 min. and in Longitude from Cape Bona Esperance, 23 deg. 10 min East; for the finding of it, observe these following Instructions.

A special Note to find St. Augustine's Bay, and how to go in.

First, it is necessary to make the Land in the Latitude of 24 deg. 20 min. because in the Latitude of 25 deg. it is dangerous falling for Rocks, Shoals, and foul Ground, that lieth to the Northward, (as you may see in the large

Draught of the Island of Madagascar, or St. Laurence) but in the aforesaid Latitude of 24 deg. 20 min. you will find it bold, and no Danger but what you see before you, and the Coast lieth North and South, by a Meridian Compass, without counting the Variation.

But steer North or North by East, as your Discretion will guide you, by the Land; and coming along the shore in 24 deg. 10 min. you will see a Headland which hath upon it a round Hill of Sand, (like the Table at Cape Bona Esperance) with some Trees by it. This Headland is short of the Bay 13 Leagues: Keep your Course still North and North by East, and there is no Danger, until you see the Island and Shoals before the Bay; and in the Country you shall see a Land rise like Westminster-Hall, and a Gut between two High-lands like Dartmouth-River: When you come to the Islands, and would go to the Northward of them, you may be bold in four Fathom; but Anchor not by them, because of the foul Coral Rocks that are amongst them, but rather haul East up for the Channel, coming from the River, till you come to the two Hills and Westminster-Hall, where you shall have oazy Ground and deep Water by the Main, in 12, 14, 20, and 22 Fathom Water. This River St. Augustine, lieth from the Islands (without) 5 Leagues, as you may see in the Draught.

Cape St. Sebastian (the Southermost Point of St. Laurence) lieth in the Latitude of 26 deg. 15 min. Longitude from Cape Bona Esperance, 26 degrees East. Upon this South-side is very good refreshing; and it is said, That in the Latitude of 24 degrees, there is a Place called Alexa, where there is good Riding in 8 or 9 Fathom Water, very

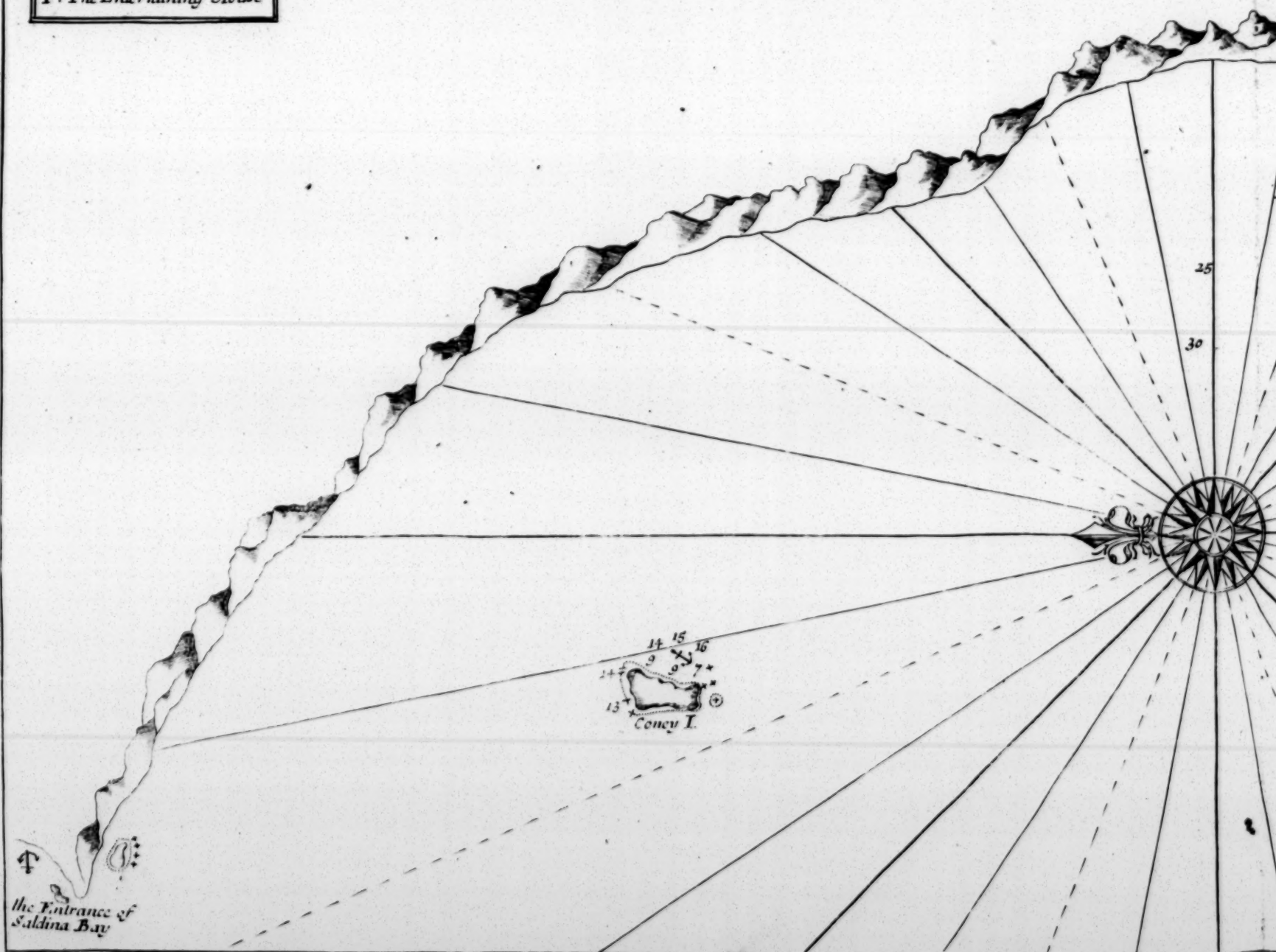
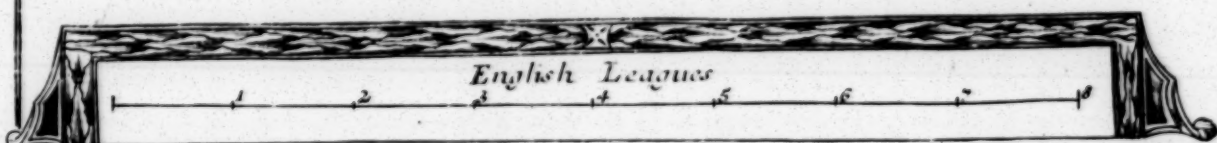
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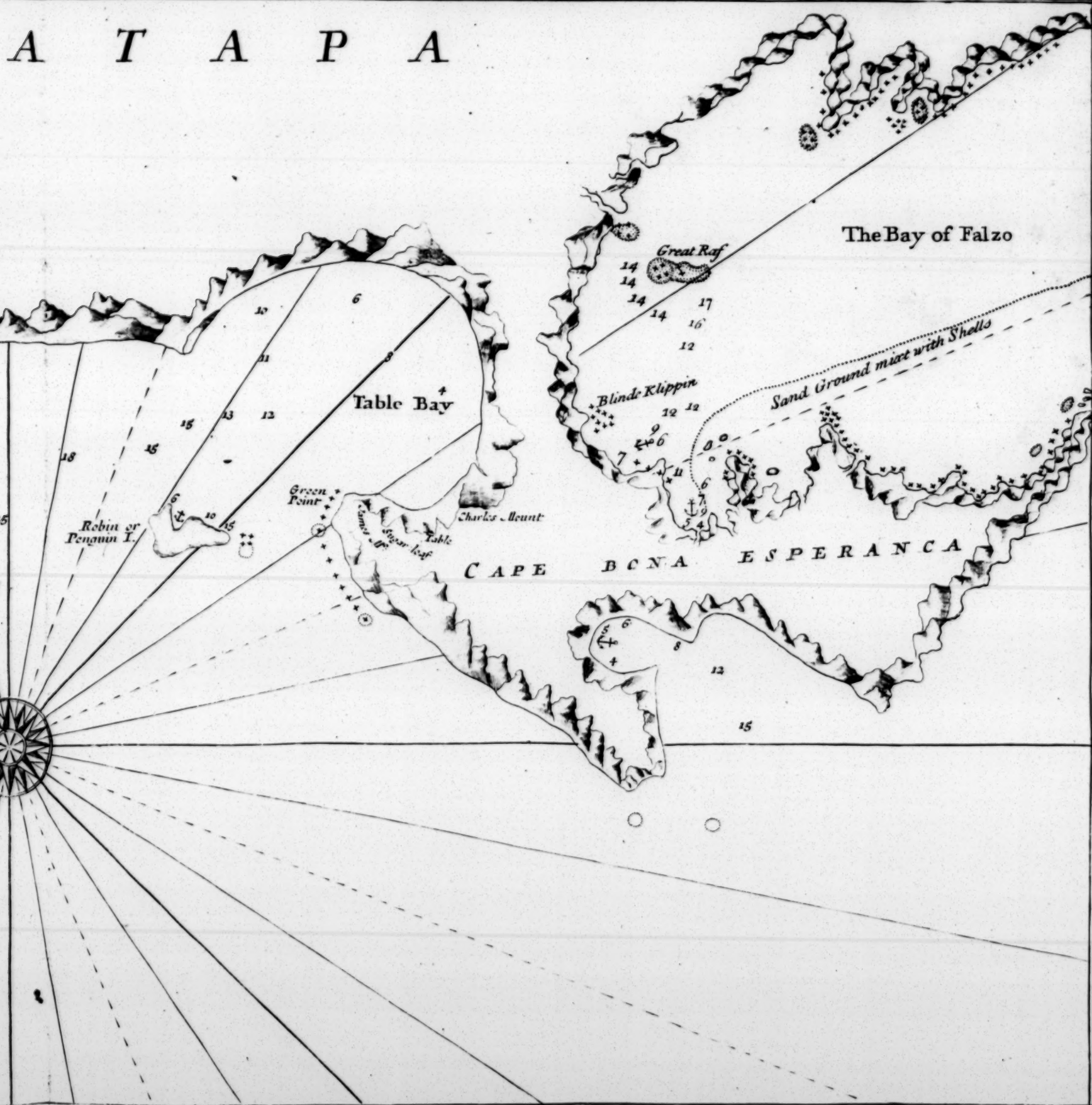
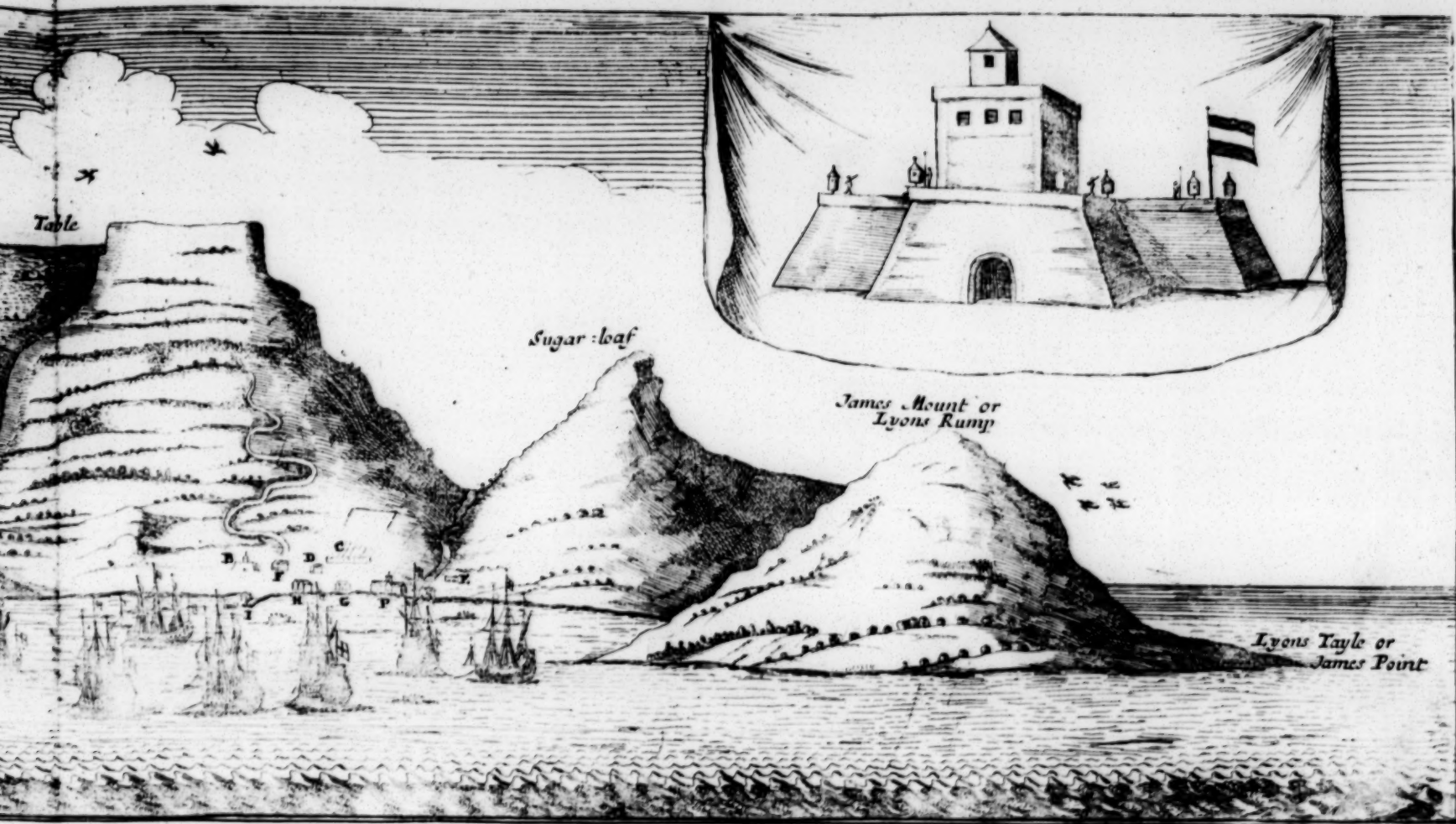
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- A. The Castle of Good Hope
- B. The Old Fort
- C. The Companies Garden
- D. The Lodging House
- E. The Stall For Cattle
- F. The Slaughter House
- G. The Hospitall
- H. The Wall
- I. The Watering Place
- M. The Foule River
- N. The Path to the Wood
- O. The Windy Hill
- P. The Entertaining House

M O N O M A

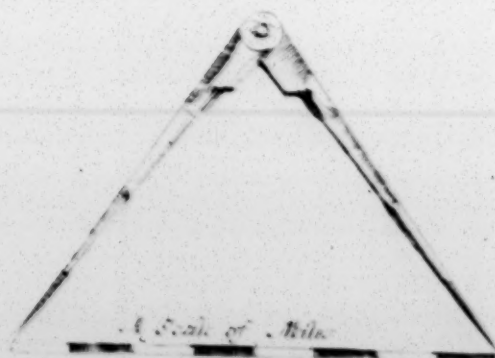








Year 1672
 in this manner
 Commander
 distance



very secure and sandy Ground, with an Island or two before it, which some say is better than the River of St. Augustin for Ships bound out or home, because it lies at the Head of the Island.

Tullea-Bay.

Tullea lies about five Leagues to the Northward of Augustin Bay; there are Inhabitants within half a Mile of the Sea, which maketh the greater Trade, but bad for Wooding and Watering of a Ship, the River being so very shallow that a Boat cannot enter, but the Road is good that lieth within the Ledge of Breakers that reach from Augustin Bay; they lie one League from the Main of Madagascar, and between them is all Oazy; and when you have the Table-Hill, or the Hill called Westminster-Hall S.E. from you, then you have the Passage open, upon which Point of the Compass you may sail directly in; it is about a Mile wide, both Heads being bold, and shew themselves very plain; without the Passage is deep Water, and when you begin to enter you will have 16, 14, and 12 Fathom Water sandy Ground; and when you have the two Heads ENE. and WSW. then you are just on a Bank, but there is seven Fathom Water on it; fear not, but keep the said S.E. Course and you will presently deepen your Water to twelve and fourteen Fathom, and then if you run in nearer to the shore, you will shoalden your Water again; you may anchor with the Passage two Points open, viz. from NW. by N. half N. to NW. by W. half W. two Miles within. From hence you may send your Boat for Water to Augustin Bay, but the best way is to Water there before you come in here. You have a large Draught of this Harbour in the Chart of Madagascar.

A Description of the East Coast of Madagascar, or St. Laurence, from the Latitude of 15 degrees 30 minutes South, to the Latitude of 24 degrees 58 minutes South.

Antongal Bay, the South Cape lies in 16 deg. 15 min. South, a fair clear Bay, going in you must keep the North shore on Board: The South side dangerous and full of Rocks, above two Miles off; the Bay is seven Leagues in the Entrance from Cape to Cape, and is twenty Leagues deep; at the Bottom of the Bay lies an Island ten Miles about, and a brave Harbour in it, the Land on both sides high and Woody; at the Island you may careen your Ship, or do any thing to her, standing upon your Guard; there is good fresh Water upon this Island; but the Inhabitants have Wars with one another, and therefore not to be trusted.

From the Cape to St. Mary's, is twelve Leagues S.E. This Island of St. Mary's, the Body of it lies in 16 degrees 48 min. South, and about six Miles from the Main, and in some places about seven Leagues. It is bounded about with a Reef, about half a Mile from the Shore; and upon the West side of it is a Harbour where a Ship of a thousand Tuns may moor with her Broad-side to the Bank. These People are civil and kind, there you may Careen, or make Mafts, or Yards, fresh Water is but about half a Mile from you. The People will come from the Main to you with Rice, Milk, Fowls, Beef, or any other Refreshment; the white Men live upon the Island, and some upon the Main. You will see a low Point of Land to the Northward of you, bearing N. by W. if you are afraid to go into the Harbour, you may anchor under its Point in what Depth you please, and you have fresh Water close by you: If you go to the Island, fall to the Southward, in 17 deg. 10 min. and then you may run in before the Wind.

Directions in what Months you may sail along the East side of this Island to Matthewtan, from St. Mary's.

About this Place is 17 deg. 30 min. West Variation. From December to February, and from July to December, is fair Weather; the Winds at E.N.E. and at N.E. and sometimes at North, but generally the Land-winds along the Coast from St. Mary's to Matthewtan, are NNE. This Place lies in the Latitude of 21 deg. 15 min. South, the Island is upon the East side, bounded with a Reef; you may know the place by a Hill, making like a Thrum Cap up in the Country; the Rivers Mouth low Land, full of Cocoa-Nut Trees, bring this Hill WNW. from you, and being about one or two Miles from shore, you ride in pretty

clear Ground: when you anchor, fire one Gun, and hoist your Ensign, and they will come off to you; the King is very civil. You purchase Slaves for Guns and Powder; it is a wild shore, you cannot Land in your own Boat.

From Matthewtan to Port Dauphin, which is in 24 degrees 58 minutes South; a special Place of Trade for Negroes.

The Coast lies along South by West. In the aforesaid Months keep not far from the shore; 'tis bold within a League off shore, and low pleasant Land till you come to make the High-land of Port Dauphin. In the Latitude of 24 degrees 40 minutes, you'll see a low Point, Rocky, breaking about a Mile and a half from shore, this Point is called Point Peer; It lies in sight of Port Dauphin; from the Point to the Bay where you lie, your Course is WNW. and you will make a bluff Point, the Cliffs of it look reddish; the French Fort stands upon it, and you may see it white. You Anchor in six or seven Fathom about one Cables length or more from the shore; this is a good Place of Trade for Negroes, in barter for Guns and Powder. You have plenty of all sorts of Provisions for your Ships Company and Negroes. The King speaks good English and French. It is a great Pity this Place is not inhabited by some white Men. Take care of falling too far to the Southward, there being a false Bay to Leeward of Cape Ramas, that is very dangerous and full of Rocks.

Directions how you may shun the Shoal going within or without to the Southward of Madagascar; the Variation here is 23 deg. West.

Going from Port Dauphin, to the Westward of the Island, or the Main, if you should be taken with a S.E. Wind, and cannot weather the shoal to the Southward, you have a good Passage through between the Shoal and the Main, but keep not the Main too close Aboard, if you do you cannot see any Passage through. Your Course through, is NW. a fair leading Channel, seven Miles wide, eleven, twelve, and fifteen Fathom Water. If you go without, you must run into 27 deg. 30 min. and this will carry you clear of all Danger; it's as dangerous a shoal as any about the Island; the Sea breaks upon it. You have continually a Current setting NW. strong between the Island and the Main of Mosambique.

Youngoule, or Maddeota, alias Morundavo, is a very convenient Port for Trade. Boats may go on shore at any time of Tide safely, there being an Inlet, or Sound; on the Bar at dead low Water, not less than two or three Feet Water; it floweth here East by North and West by South, and the Tide keeps a regular Course. On the Full and Change it is high Water at five o' Clock, and riseth twelve Foot at least within the Bar; the deepest Water is but four Fathom, which is right against the Entrance, the Sound is about three Miles large, but all shoal; there two or three Rivers fall into it, but they are all Salt Rivers; here is no fresh Water to be had but what you get by digging Wells for, by which means you may get fresh Water any where hereabouts digging your Wells but a small depth, about three or four Feet. Here is no large Timber, the Wood hereabouts being only fit for Fuel, neither good Fishing, except without the Bar, on the Sea-shore. You ride about two Miles distance from the shore in nine Fathom Clay Ground; the Water shoaleth gradually toward the shore, to that you ride as near as you will; the Land is all very low and full of shrubby Wood, not at all remarkable to be known, the Coast lieth North East and South West.

Upon the West side of Madagascar lies a good Place of Trade for Negroes, in the Latitude of 18 degrees South. You may go within the shoal, with careful looking out, and keeping your Long Boat a Head Sounding; at this Place you Anchor under a small Island, one Mile from the shore; about ten Leagues to the Northward of this Place, is also a good place for Trade; the King is very civil and kind, and likewise his People.

A Description of the North West Part of Madagascar.

Balley River lies from Balley-head East about three Miles and a half distant; soundings from twelve Fathom to five, Oazy Ground; the next Head-land to the Eastward of Balley Head-land, is the great River of Balley, from whence

E

this

From Matthewtan to Port Dauphin.

Going from Port Dauphin to the Westward of the Island.

Ballay-
River.
Bluff Hil-
locks.

this Head-land taketh its Name; on the East side of the River of *Ballay*, riseth two bluff Hillocks, those Risings are near the River's Mouth very remarkable. When you are thwart the River's Mouth, the Headland to the Westward will be N.W. by W. about six Leagues; you will find different Soundings for five Leagues off the Shore, you will find eleven, twelve, ten Fathom, Oazy and Sand; and about two Leagues off, fourteen, fifteen, sixteen Fathom sandy Ground, and Oazy.

Note, That the Land is but low, and at this distance of six Leagues off, the Head-land of *Ballay* seems like a low Island full of Trees.

Cape Ta-
ble.

The next Head-land is called *Cape Table*, and riseth like two long Tables, and is distant from the River of *Ballay*, seven Leagues East by North.

Note, That the Northernmost Table is far greater and longer than the Southernmost Table; it is the most remarkable Land all along the Coast, distant from the Shore fourteen Leagues, fourteen, fifteen Fathom Water Oazy, and Sand. You will find a Shoal off *Cape Table*, 4 Leag. and a half off Shore a little to the Westward, Latitude 15 deg. 40 min. the Table bearing SE. by E. two Leag. off, Soundings 6, 7, 8, 9, 10, 11 Fathom, Sand and Oazy; the Headland of *Ballay* and *Cape Table*, bear W. by S. and E. by N. twelve Leagues distant; when the Table bears W. by S. three Leagues off, *Mackamay* or *Maraponi*, will bear SE. half S. about 4 Leagues.

Mackamay or *Maraponi* Island is from the Main one Mile and half with Flats, and is dry at low Water. *Mackamay* Island is about a Mile and a half long, NE. and SW. and riseth with 4 or 5 Notches, having a few scattering Trees at each end, Soundings 4, 5, and 6 Fathom 3 Leagues off, hard Sand; when you are one Mile to the Eastward of it, you have 9, 10, 11 Fathom hard Sand. The Eastermost Land in sight, bears SE. by E. five Leag. off; it is the Head-land in the Indraght of *Manigaro*. On the East-end of *Mackamay*, is fresh Water in two places, and it abounds with Fish, as the Inhabitants and *Portuguese* relate. On the East side of *Mackamay* is the River of *Maraponi*, where is good Trade with Boats for Slaves, Beeves, Goats, Hens, &c. and Salt far cheaper than at *Maffaleige*; *Mackamay* lieth in 15 deg. 45 min. South Latitude.

Manigaro hath near it a Ripling, which makes it shew as though it was barr'd, but you will find no less than six or seven Fathom, and further in eight, nine, ten, eleven and twelve Fathom, Sand and Oazy. The Mouth of the Indraght is three Leagues over; I failed into it some three Miles and better, and anchored on the Western side in seven Fathom close by the Shore: I sounded with the Boat, and found no less than seven, eight, and nine Fathom Water, two Leagues in.

A Description of Maffaleige.

Maffa-
leige.

You come into *Maffaleige* Harbour on the West-side, and as you come in is the Island *Jamgomy*, it makes the NW. side of the first Harbour coming in; you must keep *Jamgomy* side, for there is a Sand between it and the Main that hath but three feet Water at low Water; as you come in, you will have no less than three and a half or four feet Water; keep a fair Birth off *Jamgomy*, and you will have seven, eight, nine, ten, or twelve Fathom Oazy: Close under the Point of the Island *Jamgomy* to the innermost Harbour of *Maffaleige* is three Miles; you borrow of East *Marren*, and steer with the East Point of the Island; you have seven, eight, nine fathom, about the Point two, three four Fathom, Oazy.

Marren.
NewMaf-
faleige.

The Point of *Jamgomy* commands the Channel, coming in and out, except it be for Prows and Boats, and the Eastermost Point of *Maffaleige*; it lies North and South three Miles distant. *Maffaleige* is an Island one Mile and a half East and West, at the Eastermost Point lieth a deep Bay, in which is ten, twelve, and fifteen Fathom Water Oazy, convenient for great Ships to winter in, and the Natives say, it is a fresh Water River; at this Point of *Maffaleige* is a Ledge of Rocks, which seems to be an Island at high Water, it is a very convenient Place to fortify, for it commands all the Island. The Island of *Maffaleige* hath good Water in it; there is a River on the South side of *Maffaleige*, from whence they Trade with the Country People, called the Houds, for Beeves, Slaves, &c.

From New Maffaleige to Old Maffaleige.

The Course is N.E. by N. 55 Miles distance; Soundings two Leagues off shore, 6 and 7 Fathom. At the En-

trance of *Old Maffaleige* are three tall Rocks, called by the Natives *Pannora*, which must be left on the Starboard side.

To the Eastward two Leagues off *Old Maffaleige*, is the River of *Didane*, but it is not Navigable, and two Leag. to the Eastward of *Didane* is *Cannadulla*, rising like Hay-Cocks.

To the Eastward of *Cannadulla*, is the great Indraght of *Morumgany*, three Leagues distance. This Indraght of *Morumgany* is double, it having another great Salt Water River called *Sundgee*, adjoining to the Mouth of it Eastward, and likewise hath three Islands, two very small, and one five or six Miles broad, and at least four Leagues long. You may anchor at the E. Point of the Harbour or Indraght of *Morumgany*, the little Island like a Rock, and the West Point of the Main, bearing East and West. And you Ride within three Miles of the Point; the outermost Point bearing NE. by E. three Leagues off the Mouth of *Sundgee* River. And the West Point you ride under, will bear E. and W. about 7 miles over. At *Sundgee*, in the River, is an Island, on which they bury their Kings. This River is Navigable for small Vessels: From *Morumgany* to the Southward of the above Island, is another round Island about a Mile broad, and not much more in length: it hath in it fresh Water and Goats, and lieth from the Main N.N.E. distant seven Leagues; and three Miles distant from the other Island. Here is found fresh Water, but so far from the Water-side, that it is not convenient to water here; this Island bearing SW. about five Leagues off. You may anchor in 20 Fathom close by the Main: The other Island being SW. by W. about three Leagues off.

Here you will see another Island bearing NNE. four Leagues; when you are two Leagues off the Main, it shews like a Wedge, and is in length one mile and an half; the high Land on the Main sheweth like Asses Ears, bearing NE. by E. Soundings 10, 20, 30 Fathom. We left this Island on the Sea-board of us, but we had like to have been a-ground on a flat of Stone and Sand that runs about a Mile from it, on the South End of the Island; so that you must borrow on the other side opposite, for there you shall have 6 or 7 Fathom. On the North side of this Island is very good Water in three places, very commodious for Boats to Water, but shoal for shipping to come any nearer than within a mile and a half.

NE. by E. from this Island, lies another Island, the distance between them being about 4 miles. This Island is about 3 or 4 miles long, and about 3 miles from the Main. I have been told by a Pilot, That it is Navigable between this Island and the Main.

And also there lies another Island NNE. from the aforesaid Island, dist. 3 Leagues, and from the Island last mentioned about four Miles. It is a round Island, and about a Mile and a half broad, and hath fresh Water on the E. side of it. Between these two last mentioned Islands the Channel is deep, as 20, 23 Fathom. A little further lies the Harbour of *Moringambo*, in which is good anchoring about half a Mile within the Mouth of the Indraght in 13 Fathom Oazy. I sounded with the Boat, and found gradual Soundings, as, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2 Fathom, and all Oazy, to the bottom of the Bay, or Harbour, and from side to side every way; it is half a Mile in breadth at your coming in, and hath a Sand Bank to run over, of 6 or 7 Fath. about two Miles and a half in length, and is broader within than at the Entrance. Here is very good Water.

This Harbour lieth in the Latitude of 13 deg. 40 min. It is an excellent Harbour for great or small Vessels, of what Burthen soever, for all Winds that shall blow: It hath a Salt-water River that comes into it; the Land is very high on both sides, but the rising on the West side at your coming in, hath a Fall to the South Eastward of the Island before mentioned, and bears from the Mouth of the Harbour SW. by W. four Leagues and a half to the Northward you have another Island greater than any before mentioned, except the biggest before described. This Island riseth like two Tables, and is very low and smooth, having a small Rock like a Sail on the N.W. of it, it bears from *Moringambo* N. about 3 Miles Distance.

Note, That from this Island, and the Islands before described, there runs a shoal, and if you steer from *Moringambo* right with the Island before described, you shall find 4 or 5 Fath. to the Northward of the Island; but if you borrow off the Main, you shall have deep Water, 10, 12, 14, and 15 Fathom, and upon the shoal you will have 3 and a half, 4 and 5 Fathom: Look out and you will

Moringambo
Harbour.

A Description of the Islands of Joanna.

Assada.

will perceive it by the Waters Alteration, and then edge nearer the Main. About 6 or 7 Leagues from *Moringambo* lies *Assada*, having the Island last mentioned on the Larboard-side to the Offing of you, and at the Point of the Indraght you will see three small Islands, one is called by the *Portuguese*, *Sumeretto*; it is like a Sugar-loaf, with another small Rocky Island between it and the Main, a quarter of a Mile distant. And another as big as *Sumeretto*, and riseth high and rough. You may pass between the Sugar-loaf and the Main, and will not have less than 11 Fathom. It lieth in the Latitude of 13 deg. 24 min. When you have entred the Indraght you will see the great Island of *Nosse*; it bears NNE. and SSW. Seven Leagues distant to the Southward of *Nosse*, is another Island round and high, 5 Miles in length: And a small Island 3 Miles in medium without them both: you must keep the Western Shore on board SSW. at least 7 leag. and then anchor in eighteen Fathom. I searched for the Road and found it where the *Portuguese Panggay* was, so brought the Ship to an Anchor in 5 Fathom Oazy, the Sugar-loaf and the Road, lying SW. and NE. nine Leagues and a half distant; it is all very deep Water till you come into the Road, 20, 30, 40, Fathom. The Indraght of *Assada* lieth in S. by W. You need not fear any Shoal, it is ten Fathom deep from Sugar-loaf to *Mangabelly* Road: There lie three Islands off the West Point of the Bay, viz. *Sumeretto*, alias *Sugar-loaf*, 3 Miles distant from the Point. There is also a smaller Island to the Southward of the Sugar-loaf, one Mile distant. When you bring the great Island to the Northward of the Sugar-loaf, and the Point on the Westward-side like a Table in one, then you have the high Land of *Mangabelly* almost shut to the Westward of the Table, or the Point bearing NW. 10 Leagues distant. *Mangabelly* riseth with Pikes and Fallings Easterly and Westerly, and appears like an Island. When you bring the West Point of the Bay, and the South end of *Ciffey* in one, they will be SE. by E. and NW. by W. some nine leagues distant. The Island rising like two Tables, and the Island to the NE. of the Sugar-loaf in one W. by S. and E. by N. 10 Leagues distant, the high South Head of *Nosse*, and the Sugar-loaf bear E. and W. some 8 Leagues distant; the W. Point of the Bay, and the Northern-end of *Nosse* bear NE. and SW. 7 Leagues distant.

Nosse is 5 Leagues in length North and South. To the Southward of *Nosse*, is a round high Island, called *Nossen-gumby*, it is about 2 Leagues long, and hath fresh Water on it. Four Miles off it seems like a Rock, but it is full of Trees and white Sand; round about it to the Southward of *Nossen-gumby*, is the high Land of *Ciffey*, seeming like an Island, but is not so, for *Ciffey* is a Promontory that shoots out from the Main. *Ciffey* is 2 Miles North and South, and riseth high like an Island. The next high Land to the Southward, is the high Land of *Mangabelly*; the NW. Head Land is an Island that riseth like Peicks, and falls E. and W. having three black Rocks, lying off the Western end of it. This Island makes a Bay, in which is the Place of Trade, and you ride in the middle of the Mouth

of the Bay, between the Island and the Southernmost high Land, that is full of Trees, in oazy Ground, at what Depth you please; but come not in less than 4 Fathom, for it ebbs and flows 2 Fathom, and there is Banks of Sand within that are dry at low Water; in 8 or 9 Fathom a good Ship may be bold to anchor, and not in much less by reason of the Sands being so near the Island, on the Larboard-side going in, is the Place of Trade.

The Ebbing and Flowing of the Tides.

At Port *Dauphin*, East and West, and riseth about 7 Feet.

At *Matthewtan*, it Ebbs and Flows SSE. and NNW. 6 Feet.

At *St. Mary's Harbour*, it Ebbs and Flows NNE. and SSW. 9 Feet.

At *Augustin Bay*, it Ebbs and Flows SSE. and NNW. about 12 Feet at Spring Tides.

At *Massaleige*, it Ebbs and Flows ESE. and WNW. about 10 Feet.

At *Dilegoa*, it Ebbs and Flows ESE. and WNW. about 13 Feet.

At *Natal*, it Ebbs and Flows SE. and NW. about 8 Feet; the Bar is dangerous.

The Islands of Cumro.

These Islands are five in Number, taking their Names from the biggest, called *Cumro*, being the first; 2. *Mobilia*, 3. *Joanna*, 4. *Mayotta*, and 5. *St. Christophers*; each of them excellent for Refreshment of Men, abounding with delicate Fruit and Cattle, which may be had at an easy rate.

These Islands are full of Natures Blessings. *Cumro* is the highest and best Land, but branded with the most subtle and bloody Savages. *Joanna* hath courteous People, and such as readily help Strangers. *Mibilia* is furnished with Oxen, Goats, and Buffeloes.

The Island Cumro.

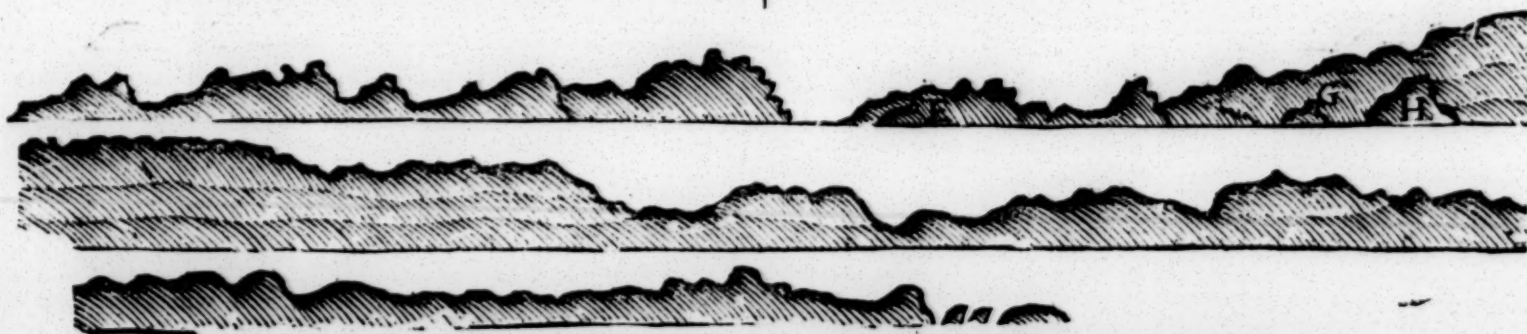
This Island lieth in the Latitude of 11 deg. 25 min. S. and is the nearest of the five to the Coast of *Mozambique*.

St. Christophers.

This Island lieth in the Latitude of 17 deg. 10 min. South, bordering upon the shoals of *India*.

Mohilia.

The Latitude of this Island is 12 deg. 15 min. South, and Longitude from the Cape 26 deg. and bears from *Joanna* W. by N. about 10 Leagues, from *Cumro* S. E. 14 Leagues; the Land rising gently, the Inland woody and mountainous: The Inhabitants are a mixture of *Mabomitans* and *Gentiles*.



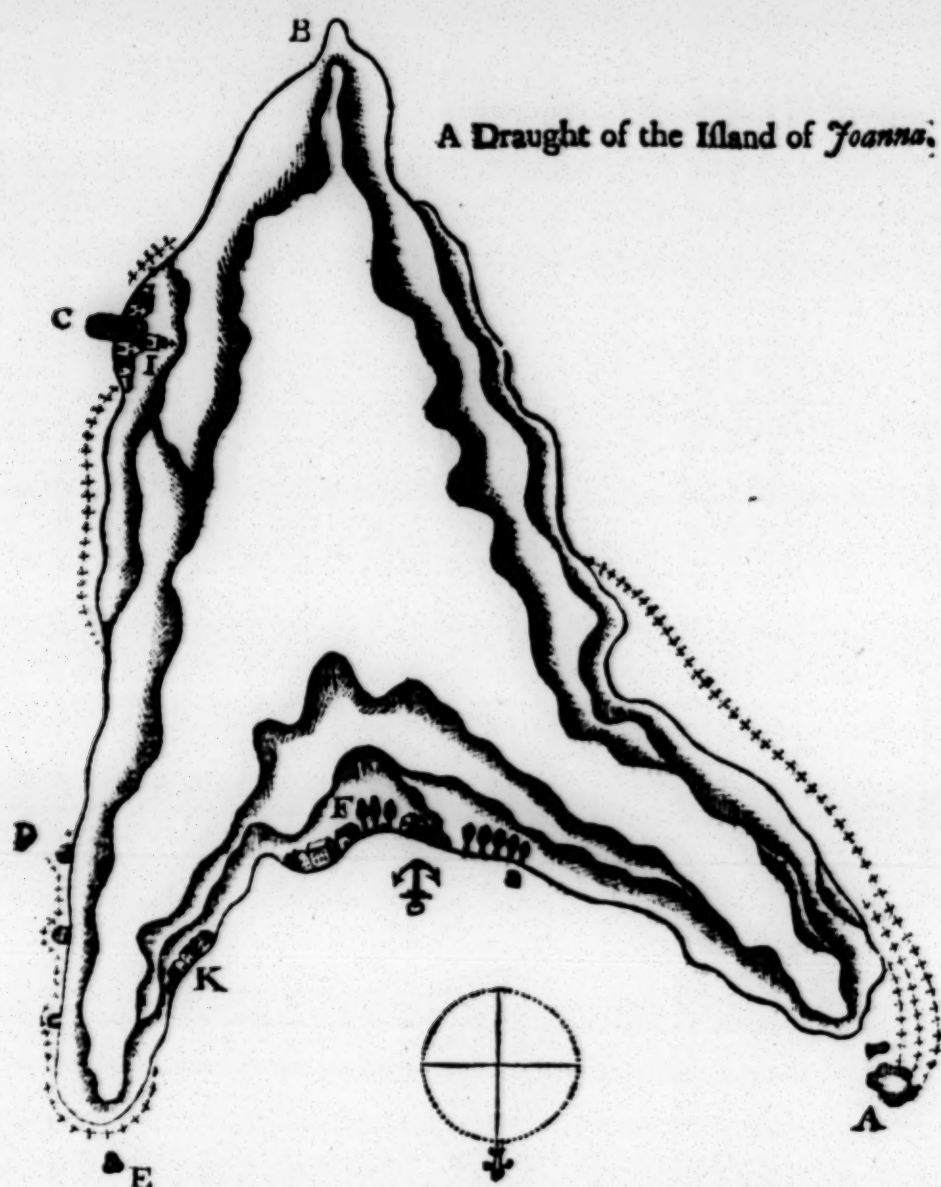
Thus sheweth the Island *Mohilia* in these three Prospects above, they being supposed to be joined to one another, as you may see by their breaking off.

The Island of Joanna.

The Island of *Joanna* lieth in the Latitude of 12 deg. 12 min. South: If you chance to fall on the South-side of the Island, have a Care that you go not about the East-side to get in for the Road, for you will meet with a Northerly Wind, and hardly be able to get into the Road, for the Flaws that come from the Land out of the Bay S.S.E. blow fresh. Here is good riding in the Road, and you may have good Refreshment, as Beef, Goats, Hens, Lemons, Oranges, Cocoa-Nuts, Wood, Water, &c. at cheap Rates. The Inhabitants are *Mabomitans*, and very courteous to the *English*.

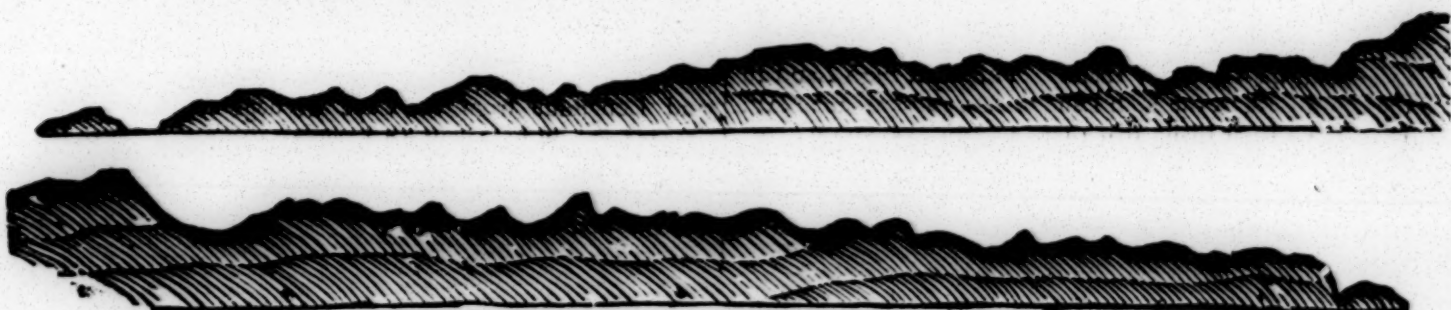
The Road of *Vafsey*, is on the East-side of this Island, about 9 Miles to the Northward of the South East Point. A West by South Moon makes High-water at Full and Change, at which Time it flows three Fathom up and down, the Flood sets to the Southward, and the Ebb to the Northward. From the South East Point of *Joanna*, to the Road of *Vafsey* Shoals are four or five Miles from the Shore, which at Spring Tides are four Hours dry, but on Neap Tides not above an Hour and a half. When the Wind is off Shore the Water is smooth, and you have no Appearance of the Shoals by any Breach, when they are under Water.

The



A Description of the DRAUGHT of JOANNA.

From A to B, the Coast lies S.E. by S. 7 or 8 Leagues. From B to C, N.E. 7 Miles. From C to D, N.N.E. 11 Miles. From D to E, N. by W. 7 Miles. From E to A, E. half N. 5 Leagues, F, I, K, three Towns, &c.



Thus sheweth the East-side of Joanna in these two Prospects, supposed to be continued at their joinings.

The Island Mayotta.

This Island lieth on the North West-side of St. Laurence, in Latitude 11 deg. 5 min. and Longitude from the Cape 27 deg. 30 min. It rises very high to the East; as you sail by it, mounting with a Pyramid, and may be seen afar off at Sea.

Of the Island of Mauritius.

Mauritius lieth in the Latitude of 20 deg. 5 min. South, and in West Longitude from Cape Comorine, 38 deg. 20 min. This Island abounds with all Things requisite for the Use of Man. It is high and mountainous, but every where sweet and flourishing; it procreates a healthy Air. Here are variety of Fish.

This Island hath many good places to anchor in; two of which are well known, the one on the NW. side, which bears the Form of a Semi-Circle, and lieth in 19 deg. 30 min. South Latitude. The other on the S.E. in 20 deg. 15 min. Both Bays seem Land-lock'd. The Ground is

Oazy; you may anchor in what Depth you please, as in five, ten, fifteen or twenty Fathom.

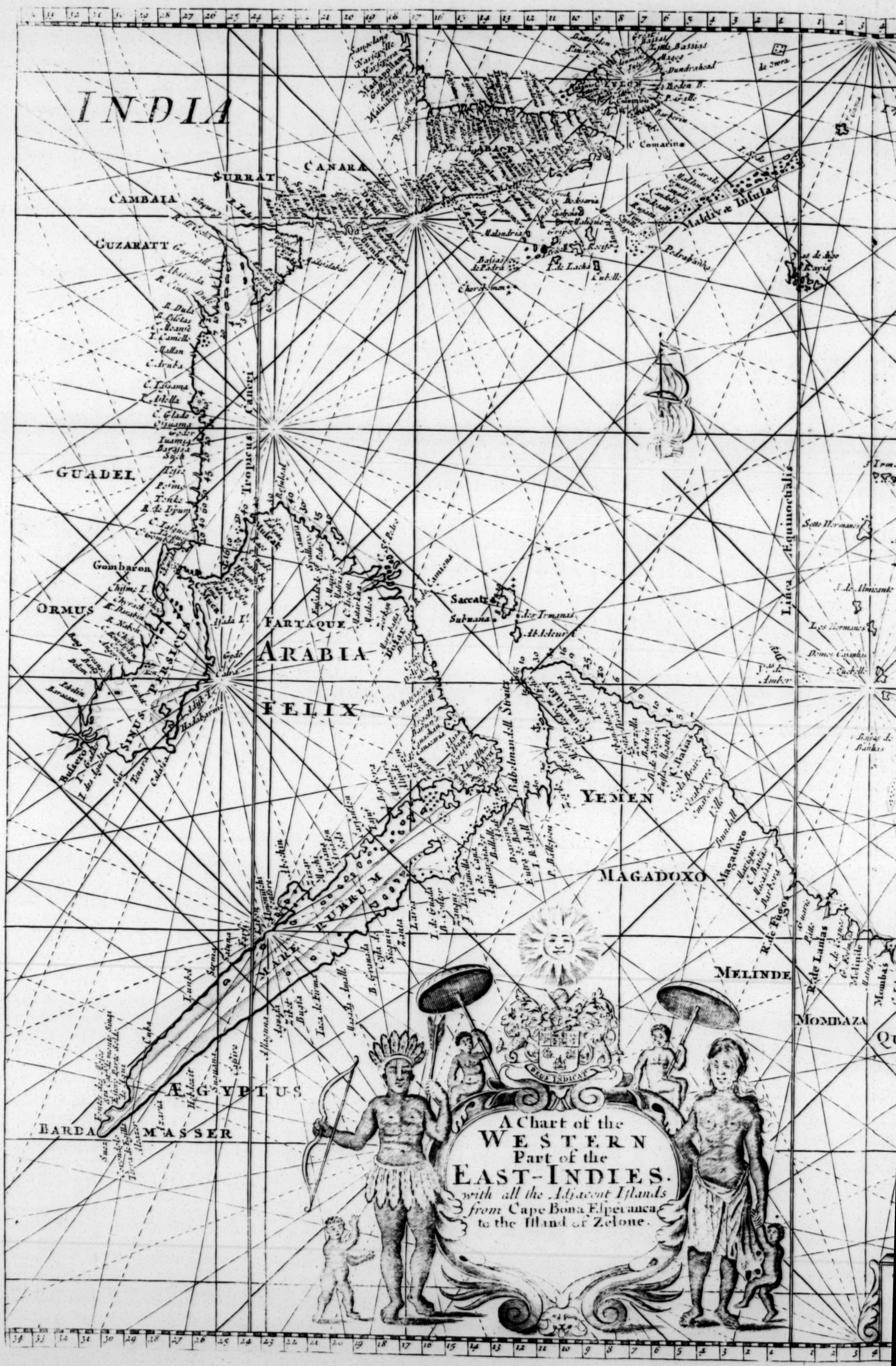
Coming from the Eastward, or from the Southward, you may keep close to the shore in six or seven Fathom Water, but you must go no nearer, for you will be taken up with Coral Ground; and going in, you will find an Island called Cooper's Island; come no nearer to it than five Fathom Water, as you may see in the Draught.

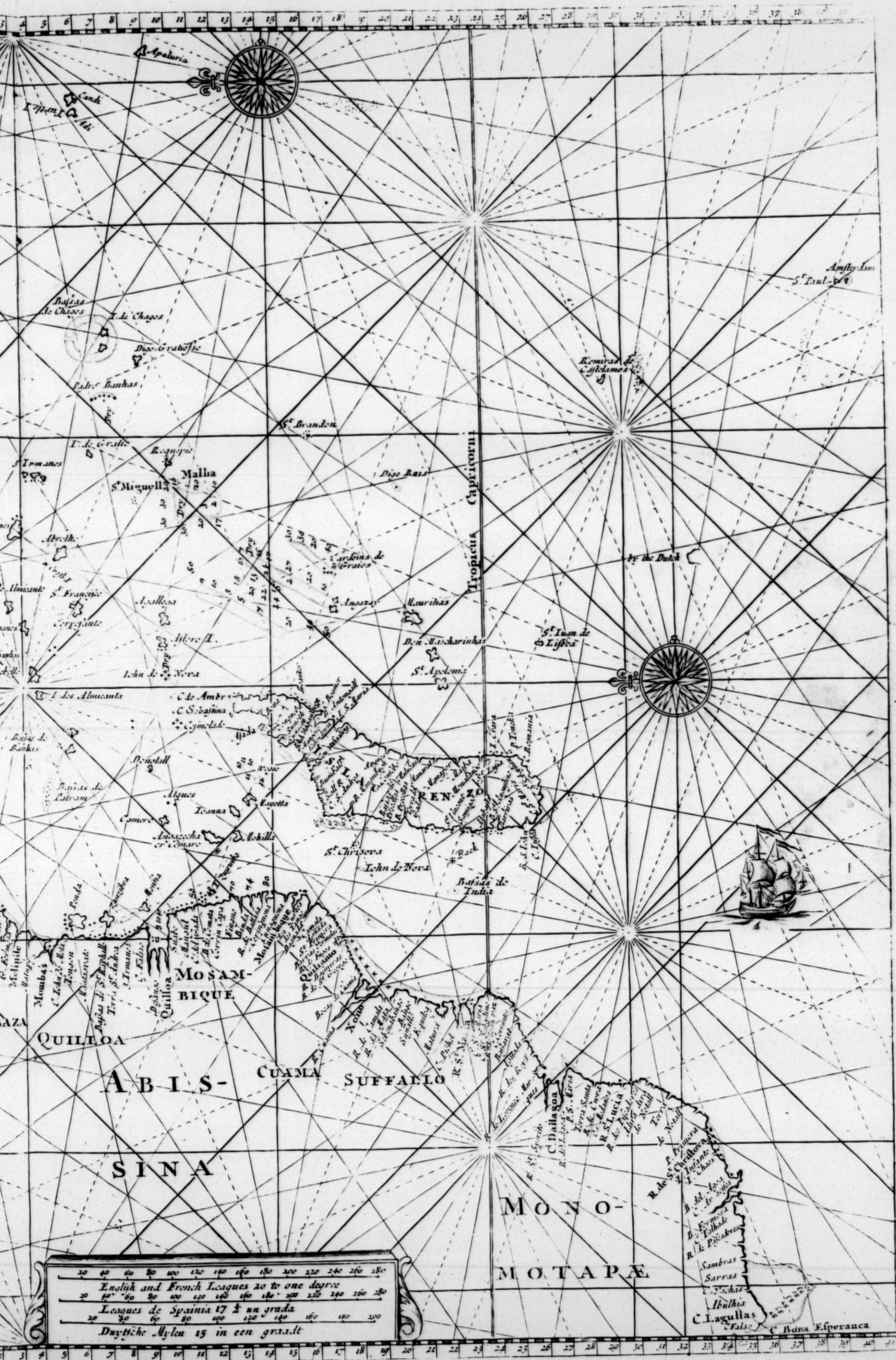
When you bring Peter-Butts-Head open with a Fall in the Land like a Saddle, then you are in the best of the Channel; but if you go but a Cable's Length more Eastwardly, you will be upon the Rocks.

You may also perceive another Peak which lieth below Peter-Butts-Head; and before you luff in be sure they two be shut into one another; or else the Coral Ground on Cooper's Island, will take you up: But when you are between these two, you may safely luff in, for the Wind is commonly off the shore at S.S.E. The general Custom is to send the Boat before to sound and try the Ground; and when you have endeavoured what you can, you must warp in, because the Wind is off the Shore, and the Channel narrow.

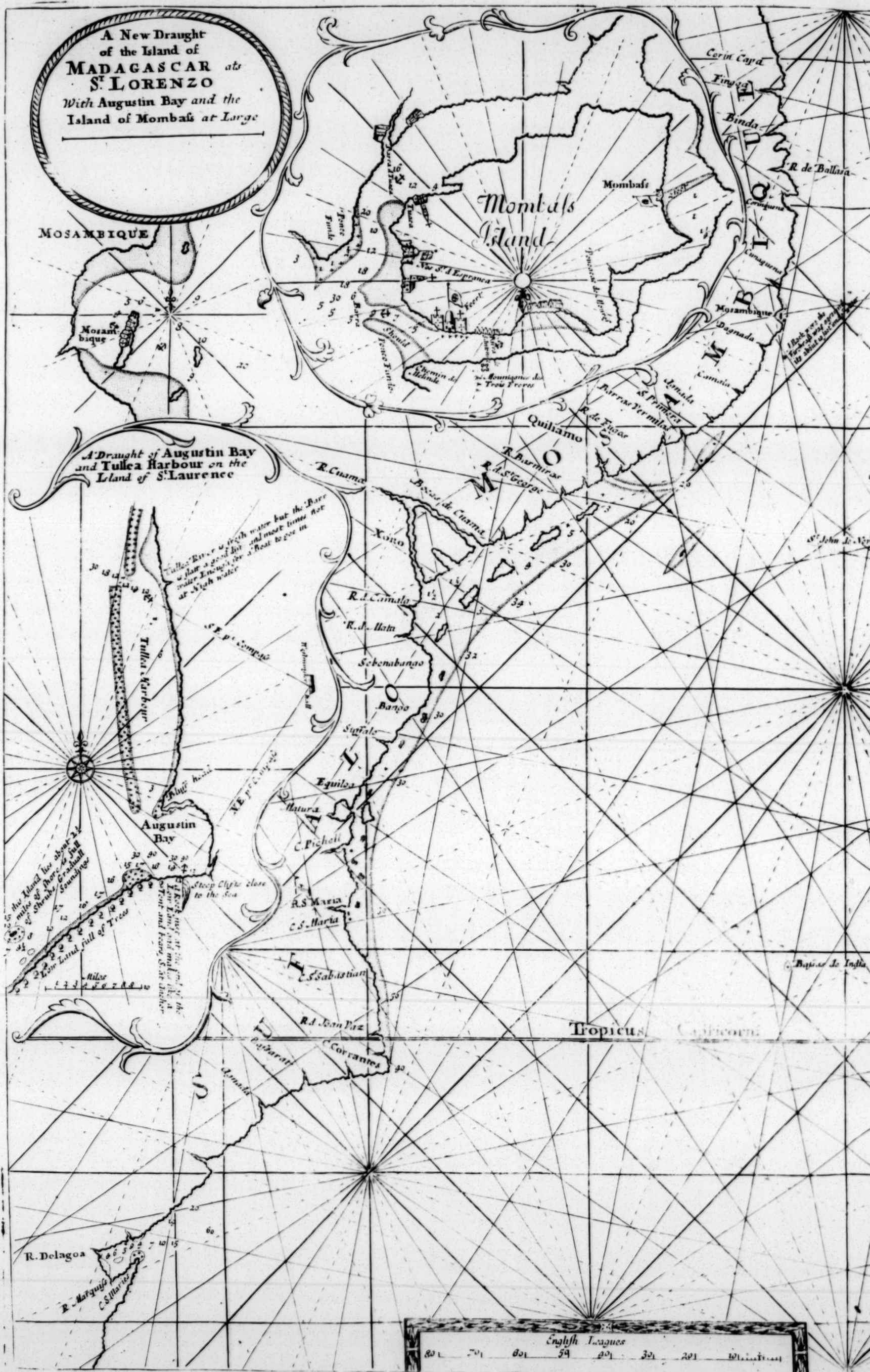
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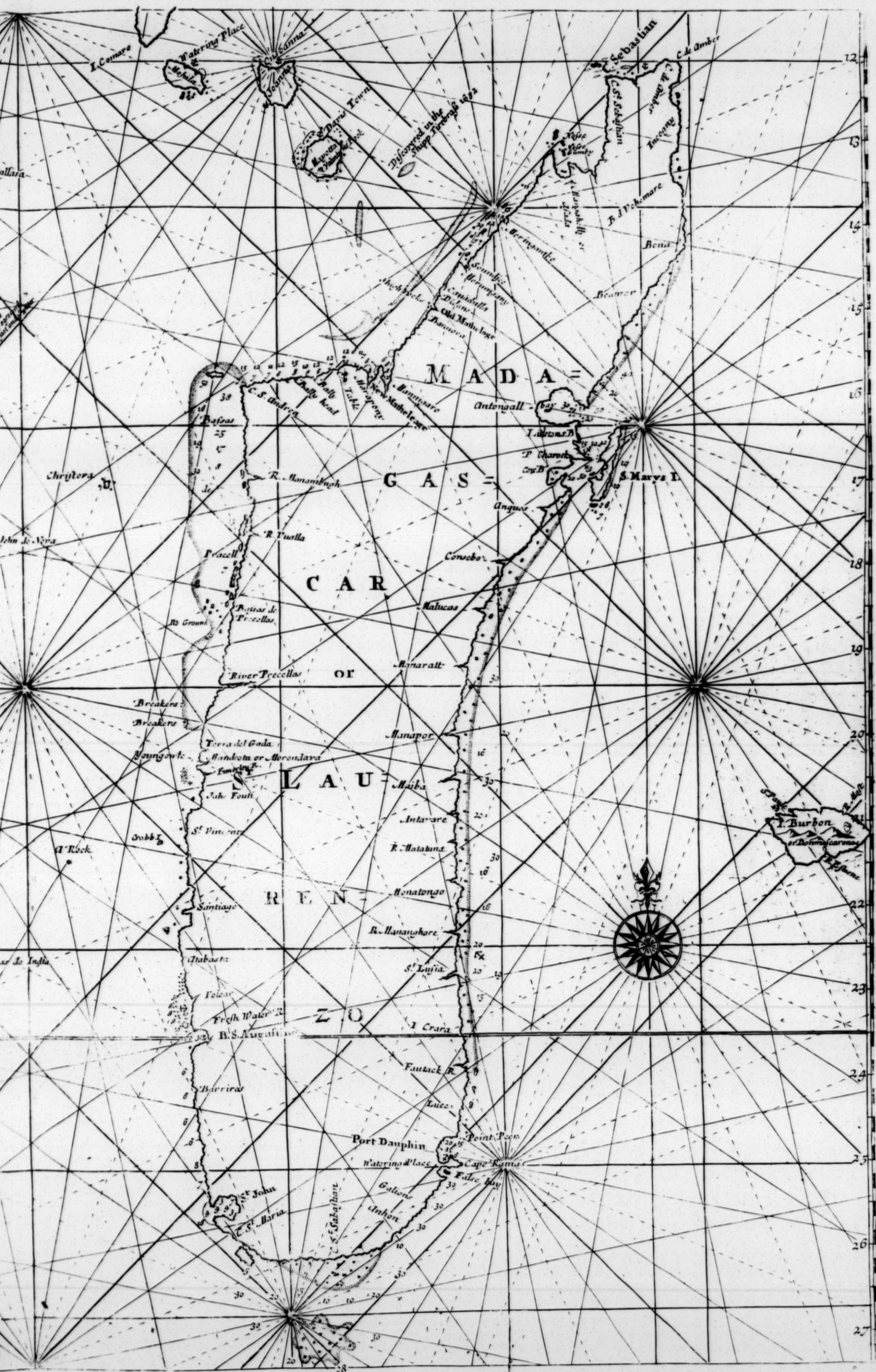
Map Room

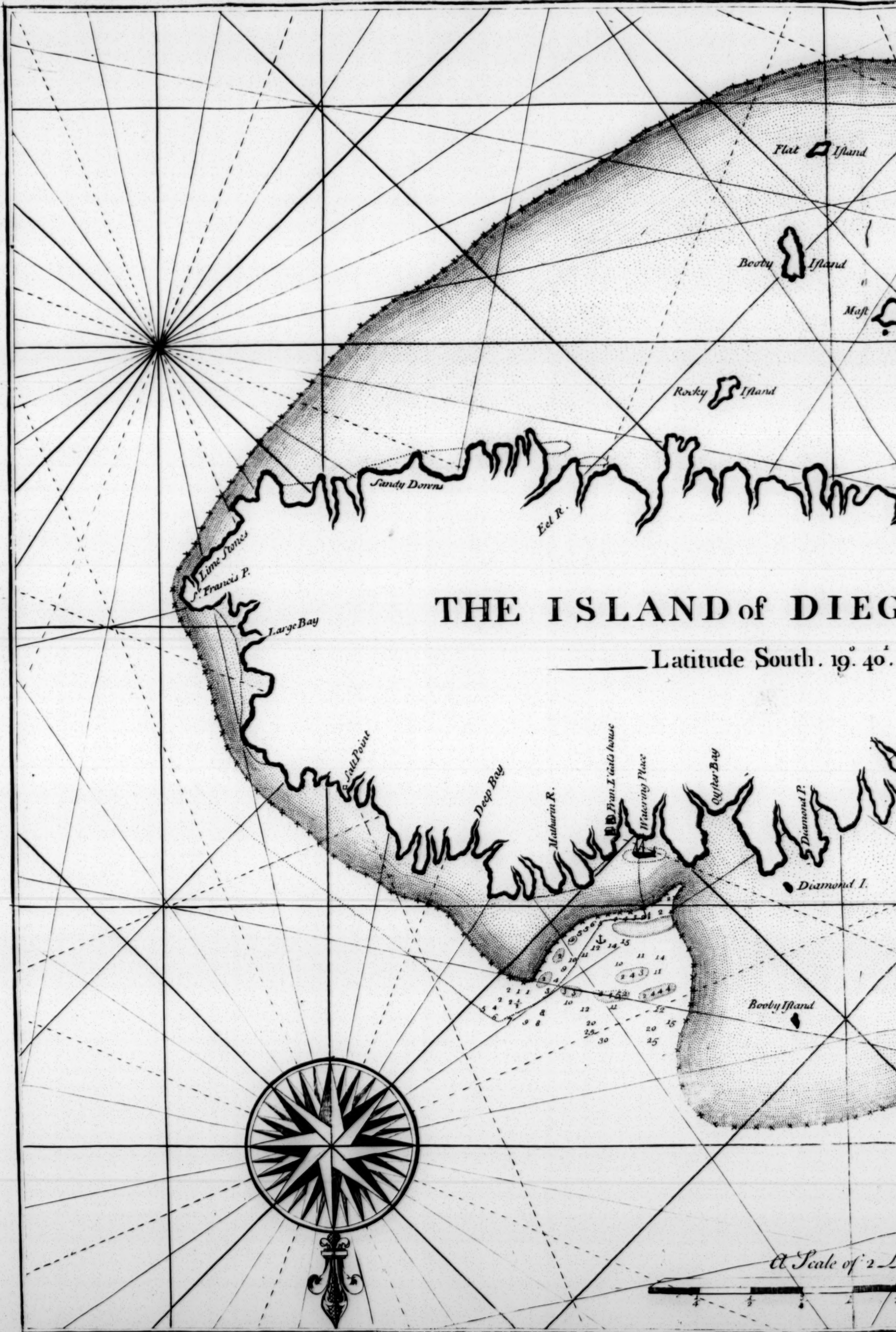




A New Draught
of the Island of
MADAGASCAR *aka*
S^t LORENZO
With Augustin Bay and the
Island of Mombasa at Large



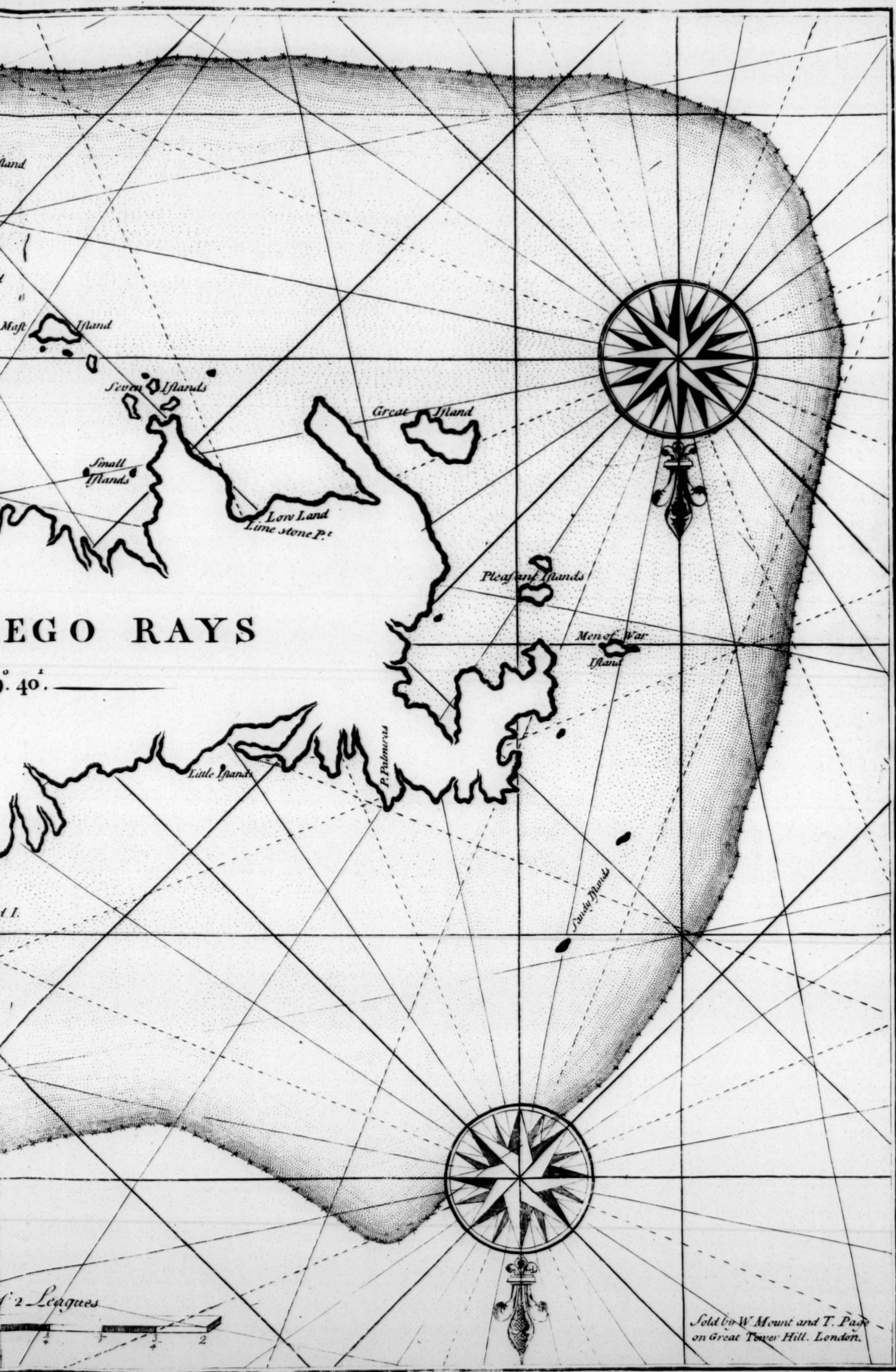




THE ISLAND of DIEGO

Latitude South. $19^{\circ} 40'$.

A Scale of 2



EGO RAYS

40.

2 Leagues

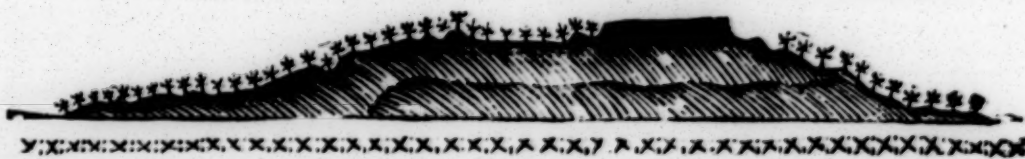
Sold by W. Mount and T. Page
on Great Tower Hill. London.

Thus sheweth the *Mauritius*, when you are distant 15 Miles; and the Southermost Land in sight, bearing West by South from you, which is the bluff Point, and near to a Castle inhabited by the *Dutch*, but you cannot see that; the high Peak is called *Peter-Butts-Head*, bearing West by North; and the Northermost Point in sight beareth NW. fine champion Land by the Water-side; but is cragged Land up in the Country, and full of Trees.



Thus sheweth the NW. side of the Island *Mauritius*, being distant from the NW. Harbour about ten Miles; the Harbours going in is right against the high Peak, called *Peter-Butts-Head*. The Depths going in you shall find to be 5, 8, 10 Fathom sandy Ground: and when you are further in, you may ride in 6 or 5 Fathom Water, oazy Ground. The Bearing of the Island when you are without, and to the Westward as before, is as followeth; the Northermost Island bearing ENE. the middlemost like a Gunners Quoin E. by N. the other called *Round Island*, East by North, two thirds Northerly.

The Island *Diego Rais* lying distant 150 Leagues to the Eastward of *Mauritius*.



Thus sheweth *Diego Rais*, when you are to the Southward of it about 8 Leagues, the Eastermost end being a long low Point, bearing NE. half Easterly; the Northermost end maketh with a double Point N. by E. half Northerly; the Breakers lying all along the South-side of it, about five Leagues off.

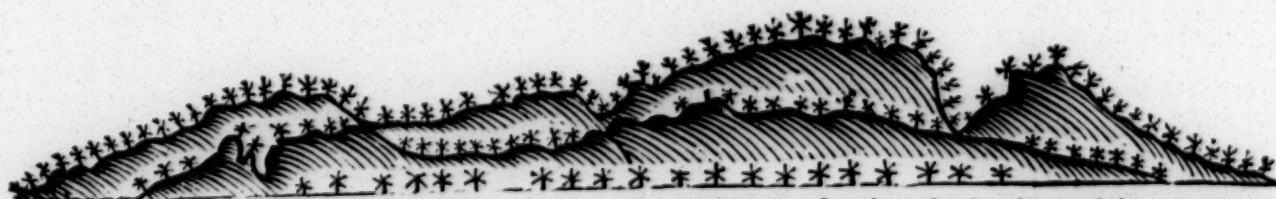
Directions for the Island Diego Rais.

The Island *Diego Rais* lies in 19 deg. 40 min. South Latitude, and in about 45 deg. Longitude, East from the Cape of Good Hope. The Draught was taken from a Survey made by the *French*, who sent proper Persons to view this Island and the Island of *Mauritius*, in order to make Choice of the best for a Settlement; though they gave the Preference to the latter, on Account of its being the largest, and having the South East Harbour which is secure against the Hurricans, but in all other Respects they allow this Island to be as good. Wood and Water are to be got here with ease at the Place where the Challope is markt in the Draught, and there is abundance of Fish of several sorts, especially *Turtle* and *Lamantin* or *Manatee*, which keep in Numbers within the Breakers on the Shelf round the Island, and are easily taken at low Water: There is plenty of several sorts of Trees fit for Fire-wood and other Uses, among others abundance of Ebony, many sorts of Herbs for the Pot, with plenty of Land Turtle. The Soil is rich and the Island healthy; if the Wind be far Southerly it may be difficult (especially to such as have not been there) to get into the Bay, but by coming to an Anchor without and warping in, as the *French* frequently do. The Variation as I observed it four Leagues North from the Island in the Year 1741 was 20 deg. 50 min. Westerly. The distance between this Island and *Mauritius* as set down hitherto in our Pilot Books is very erroneous, for the *French* who see it frequently, in going to *Mauritius* now called *Isle de Franca*, never make it more than 90 Leagues, and on the other hand they find the Distance from the Island of *Mauritius* to *Madagascar* to be 60 Leagues more than laid down in our Pilot Books. It may not be improper here to take Notice of an Observation the *French* make in their Navigation from *Pondichery* to these Islands, which is, that the Ships that sail in the North East Monsoon are

generally 100 Leagues or more a head of their Reckonings: I could not have believed this, if I had not had the Experience of it in the Ship *Lys*, commanded by the Chevalier *Pontevex*. We left *Pondichery* on the 17th of January, 1730. Our Intention was to go round the Cape without coming near these Islands, but on the 22d of February, to our great Surprise, we had sight of the Island *Mauritius*, and the next Day saw *Mascurine*, when according to our Reckoning we ought to have been about 70 Leagues to the Eastward of *Diego Rais*: This Error was the more extraordinary, as we had been but 36 Days at Sea, and that great Part of our Distance was North and South, in which we had discovered no unusual Errors; and that our Reckoning for the rest of the Voyage to *France* came out very well. The Variation during this Voyage answer'd our real Distance, and put us on our Guard. As we approached the Islands we found the Weather overcast, and the Trade-wind unsteadier than usual. While we were in sight of these Islands we had little Wind veering round the Compass and perceived a Current setting ten Leagues a Day to the North Westward.

Don Mascharinhas, or the English Forest.

This Island bears this first Name from *Seignior Mascharinbas* a *Portuguese*, after his own Name, at the first Discovery of it. But it's later Name is received from Capt. *Castleton*, Commander of the Ship *Pearl*, in the Year 1613. The Island is about fifty Miles in Circuit, and the South Pole is elevated 20 deg. 55 min. In Longitude 1 deg. 30 min. from the Meridian of *Mauritius*, West. It is exceeding lofty, every where green, and ever flourishing, pleasantly apparel'd with store of Trees. It had no Creature, except Birds, until our Captain landed some Hogs and Goats of both Kinds, that by a happy Multiplication and Encrease, the future Visitants might be relieved, and bless the Planter. It wants not Water, both sweet and plentiful; the Birds are very rare and excellent.



Thus sheweth the Island *Don Mascharinhas*, or the *English Forest*, when the Southermost low Point. beareth South by West about ten Leagues off.

Of the Malha.

The *Malha*, The Northernmost part, lies in the Latitude of 9 deg. 55 min. South; and Meridian distance from *Bombay* 11 deg. 40 min. West, it is steep too: I fell in with the Westernmost part of the North-end, and had fifteen Fathom Water, Coral Rocks, and the next east eight fath. upon which I bore away North by West, and tho' but a

small Breeze yet deepen'd every Cast, as 12, 15, 22, 25, 32, 60, 85 Fathom, and then no Ground. I came upon it again in 15 Fathom Coral Rocks, as before, the next Cast had 12, then 10, and fearing shoaler Water, tacked and stood off NNE. and had 11, 12, 13, 14, 17, 22 Fathom; and having run about a Mile and a half, lost Soundings; it is reported the Southernmost end of this Danger is very shoal, and in some places dry. The Variation about 16 deg. 40 min. West.

In this Latitude of 16 degrees 18 minutes South, lies the dangerous Shoal of *St. Brandon*, where the *Falcon*, Capt. *Edward Ledger*, was in danger of being lost. Longitude from *Surrat* 9 deg. 30 min. West. You have a particular Draught of these Shoals in a Corner of the *Mauritius* Draught.

Directions for the Coast of Arabia; and first of Babelmandel and its Streights, with Moha in the Red-Sea.

Moha.
What
time to
fall into
Moha.

Obtaining
of Socatra
tray.

HE that would sail to *Moha* in the *Red-Sea*, it is requisite he should be entering the Streight in the Month of *March*, or by the middle of *April*, in respect of gaining his Passage, and Price for his Goods; the Winds up the Gulph, are generally at SSE. very fresh until the latter end of *April*, and sometimes the beginning of *May*; but that is very late, and then turneth to the NW. and WNW. until the middle of *August*, and then they return to the SE. in the Gulf: If you obtain *Socatra*

tray by the beginning of *April*, then may you keep the middle of the Gulph, or either Shore, as you find the Wind enclined; for then there is little or no stream.

But if later, you must keep *Cape Guardafoy* on Board, C. *Guardafoy*, and the *Æthiopian* Shore, until you are as high that you may fetch above *Aden*, with an Allowance of a great Stream, that setteth down the middle, which is seldom found wanting all that time of the Year.

NNW.

N. by W.

NNE. half E.



Thus sheweth the Island of *Socatra*, at these Bearings, distance 5 or 6 Leagues off.

WSW.

WNW.



Thus sheweth the Land of *Guardafoy*, as you come from the Eastward, distant about four Leagues.

SE. half S.



Thus sheweth *Mount Felix*, bearing SE. half S. 4 Leagues off.

You may sail within one Mile of the *Æthiopian* Shore, there is nothing to hurt you but what is above Water, without it be flaws from off the Land, which many times is advantageous, but very heavy when the wind is at West.

Here note, That the *Æthiopian* shore and *Socatra*, is high Land to be seen 12 or 13 Leagues off.

Sight of
Aden.

When you first make *Aden*, it appeareth like a ragged high Island, and as you shoot up with it, appeareth like two Islands, but they are all the main Land, it being low

fandy Strands; between these high Lands, which is the Cause they appear so when the Body of the Westernmost beareth N by W. and the Body of the middlemost NE. by N. distant four Leagues and a half, then the Body of the Easternmost will bear ENE. Easterly.

When you have obtain'd *Aden*, you may sail along the Shore by your Soundings, standing off to 30 Fathom, and in to twelve Fathom, there being nothing to take you between *Babelmandel* Point and *Aden*.

North three quarters West.



Thus sheweth the high Land of *Aden*, as you come from the Southward, and are distant about seven or eight Leagues off.

Your Course from *Aden* is SW. by W. half W. distant 23 Leagues, depth from 15 to 30 Fathom, Sand and Coral Rocks; and then West 20 Leagues to *Babelmandel* Point, depth from 12 to 30 Fathom, but the most safest way, is to keep the Shore on Board by your Sounding, where many stop for a flatch of Wind, when they are late in the Year.

Sight of
Babel-
mandel
Point.

When you first get sight of *Babelmandel* Point it maketh like a Quine. Then you will have sight of the *Babs* (which Island maketh the two Streights) and the Islands on the *Æthiopian* Shore, bearing South West.

To sail
thro' the
Streights.

To sail thro' the *Narrow* Streights, or between the Point and the *Babs*, you must run up with *Babelmandel* Point until you have the aforefaid Streights open, then may you sail thro' as you please, giving the Island-side a small Birth. You will have depth from eight to fourteen Fathom, uneven Soundings, and Coral Rocks. This Streight is more commodious to go through, than the broad Streights (for Strangers) that is made by the Islands that lie off the *Æthiopian* Shore and the *Babs*, for through the great Streight is no Ground in 40 and 50 Fathom, and always a great Current running one way or other, according to the time of Year.

When you are shot through the Streights about a Mile, then your Course is N. by W. half W. six Leagues, and that will bring you into ten or twelve fath. within four Miles

of the Shore, against a Bluff Land; from thence your Course is NW. by W. eight Leagues, Depth from 20 to 4 Fathom, which will bring you fair up with the Sand that lieth to the Southward of *Moha* Road, which you must not come nearer than eleven fath. for if you do, there will be uneven Soundings, but keep the Depth of eleven fath. at about five or six Miles from the Shore, until the highest Spire in the Town beareth E. by S. Southerly; then you may haul in for the Road, and Anchor in five Fathom or under, as you please, as by the large Draught of the Streights of *Babelmandel* and *Moha*, you may more plainly see.

Moha
Sand.

The Course from the little Streights to *Moha* is NNW. Tides, half W. distant forty Miles, with an Allowance of the Variation, which was 16 degrees West, in the Year 1709: For Tides here are none that can be taken Notice of, for they do not keep Course according to the Moon; yet at Full and Change it floweth 8 foot up and down.

The Streams set as the Winds blow (that is in the Gulph,) except sometimes at Full and Change, then it has been known to set to the windward two or three Days.

Moha is a fair Town, seated on the Strand in a small Bay, there being a Castle to the Northward on a Point of Land, another to the Southward on a small Island, that maketh the Bay, when you are in the Road, it appeareth as the Figure in the Draught thereof.

Streams.

A Description of the Coast of Arabia Felix, from Macullo Bay to Dofar.

Variation

Before we proceed to describe this Coast, there is two things that will not be amiss to mention, or treat of, that is Variation, and the Nature of the Winds on this Coast.

The Variation in the Year 1709, by good Observation, was found to be 14 or 15 deg. Westerly; therefore in all these following Descriptions, there is an Allowance for it, it being laid down according to the true Meridian.

The Winds bloweth on these Coasts SSW. and SW. and so variable to the W. with hard Gusts, and sometimes Rain from the beginning of April to the middle or latter end of August, and then it turneth about to the Eastward proving little Wind, and great Streams to the Westward, and so continues to the latter end of March, with sometimes Land and Sea-Breezes, but very faint, if any thing incline to the Westward; and mighty fresh if to the Eastward.

Therefore he that comes from *Mocha*, and is bound to the Eastward, as *Muscate*, *Surrat*, or any part of *India*, and late in the Year, as the Middle of August, he must not come near this Coast, but keep well to the Southward, and then he will meet with the Winds at SW. which commonly bloweth to the middle of September. I being there late in the Year 1690, the latter end of August, by our running with the shore, we lost our Passage, being bound to *Muscate*, and was forced to turn up alongit the shore,

as high as *Dofar*, and then to put for the Coast of *India*.

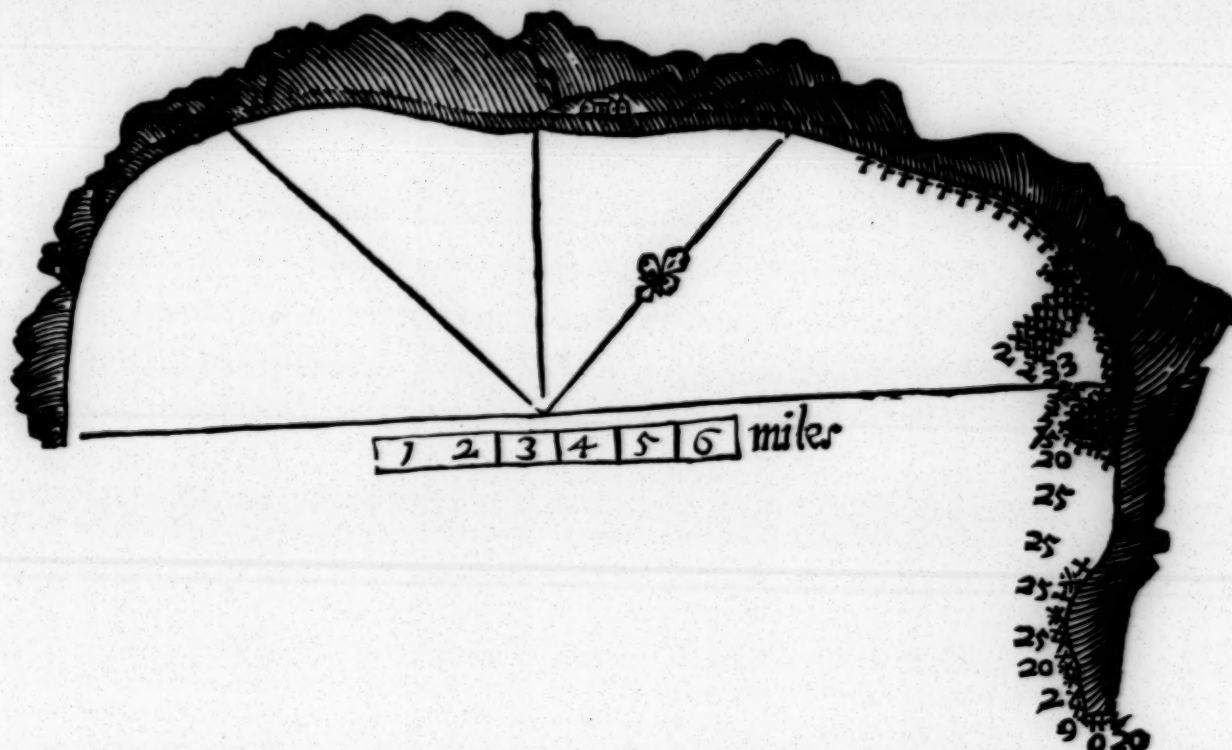
Here is no dealing with this Coast, from the beginning of April to the latter end of July; for the Wind bloweth out of the Sea at S. and S S W. with great Gusts and Rain; neither is here any Harbour or Road that lieth not open to these Winds, and no Sounding to be had six Miles off the shore in many places.

Maculla Bay lieth in the Latitude of 14 degrees 46 minutes North, and is at least three Leagues deep, and six Leagues over, very high Land all round, but at the NE. Point is a Mountain something higher than the rest, under which is a Road for Easterly, Northerly, and NW. Winds, within a small Point of Rocks where you must Anchor within a Cable's Length of the foresaid Point, as by the Draught hereunto annexed, you may more plainly see.

The Point is wholesome and sound, no Danger but what you will see. Three Cables Length from this Point NE. is a Ledge of Rocks, which sometimes the Sea breaks on; to anchor here, bring the Eastward Point SE. and Westernmost Point SW. Depth 3 Fathom and an half; this Road is distant from the Eastermost Point about 3 Miles.

You may anchor in most places of this Bay, in the bottom in fifteen and twenty Fathom, within a Mile of the shore, in the bottom of the Bay, is a small Town called *Foa*, and on the Point some Fishermens Houses; Fish here is cheap and good, but Water mighty dear as is all other Provisions.

MACULLA BAY.

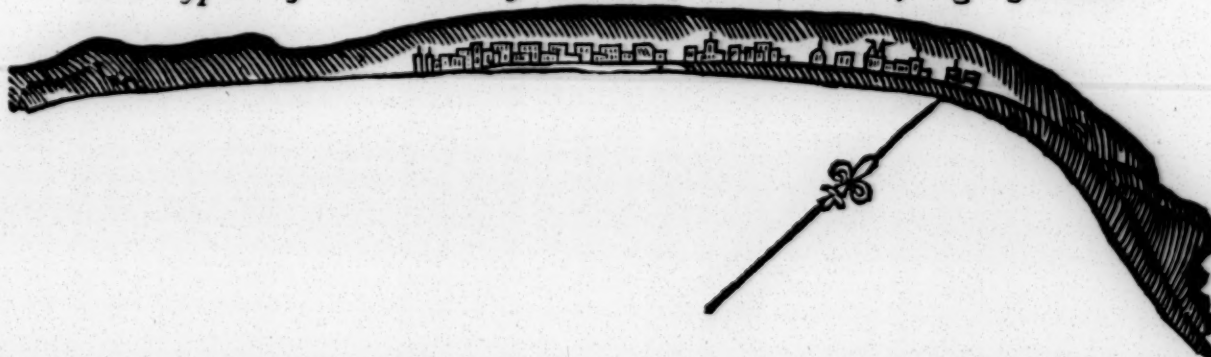


From *Maculla* Point to *Shabar*, the Course is East by North distant 12 $\frac{1}{2}$ Leagues; between which lies several Towns, of which some are not civilized, after you have passed *Maculla* Point you may keep along the shore in what Depth you will from 9 fath. and upward.

Shabar is a fair Town situated on the Strand, lying in the

Latitude 14 deg. 52 min. North, and to be seen in clear Weather five or six Leagues, looking like white places of Cliffs at that Distance; it is further to be known by two Hills, one to the Northward, and another to the Southward, as in the annexed Figure; the Inhabitants with their King received us kindly.

A Prospect of the Road of Shabar, in Latit. 14 deg. 52 min.



Anchor.

To anchor in the Road, which is no more than a plain shore, bring the Northernmost Hill to bear NE. and by N. and the Westernmost Hill W. by Compass, then you will have 9 Fathom Sand and Oazy, being right before the Town.

Cape Bogathua.

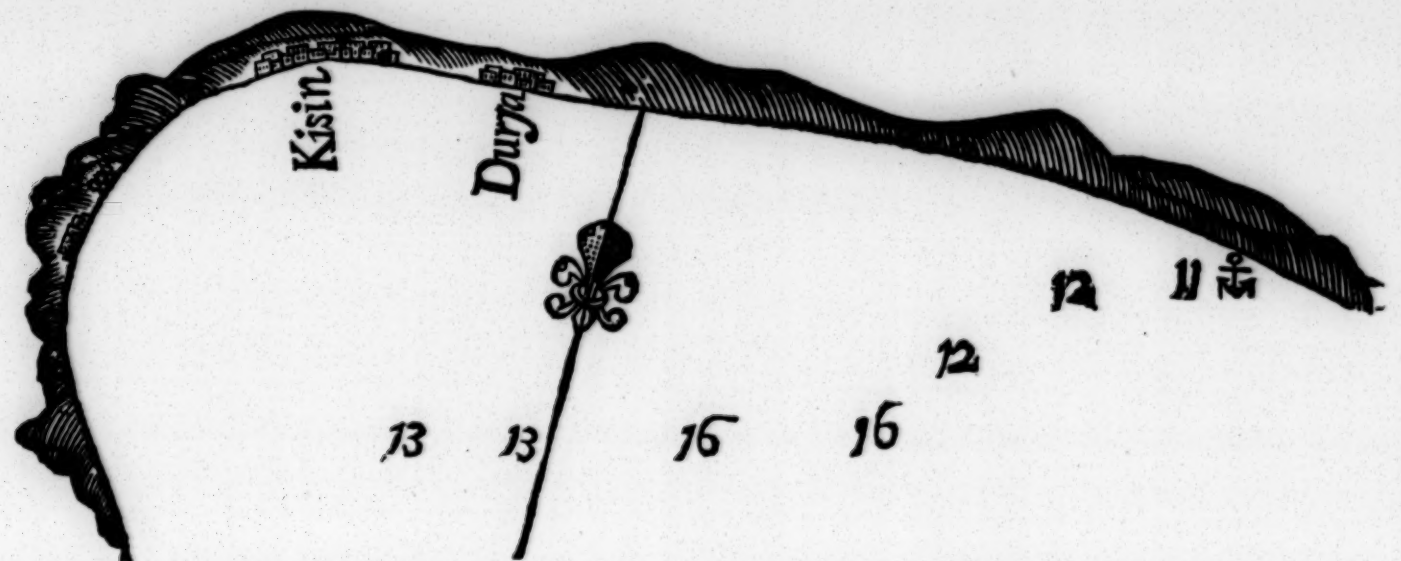
From *Shabar* to *Cape Bogathua*, the Course is E. 15 Leagues, which is wholesome and sound, there being nothing to take you up, it is indifferent High Land, almost steep too, five or six miles off, 50 or 60 Fathom; but within two or three Miles, ten and twelve Fathom, and so deepens gradually.

From *Cape Bogathua* to *Kaisun* Point, the Course is ENE. $\frac{1}{2}$ E. distant 29 Leagues; the Land between which is moderately high in the Country, to be seen at least ten Leagues; but in some places low by the Water-side, where there is seated many small Villages, this shore is wholesome and Sound, having 3 or 4 Miles off 30 or 40 Fathom.

This point of *Kaisun* is very high Land, and remarkable above all others by two Starts of Land that sheweth like Asses Ears, and are to be seen at least ten Leag. when they bear

bear E. by N. half N. as soon as you bring the Point to bear N. and by W. of you, you will see two small Towns, *Kaisun* and *Durja*, the Road for which is the NW. part,

in what Depth you please, as you see in the following Figure.



Cape Fortuack.

From *Kaisun* Point to Cape *Fortuack*, the Course is ENE. distant fourteen Leagues. The shore between is high and mountainous in the Country, and low by the Water-side, with some small Towns.

Here the Soundings are something more favourable, for six miles off you shall have 17 Fathom, and then gradually in along until you come up with Cape *Fortuack*, and then not under 40 or 50 Fath. within one Mile and a half off the shore; we were forced to warp about this Cape, and tow with our Boat as we have done at several Places: This Cape lies in Latitude of 15 deg. and 48 minutes, distant from the Meridian of *Babelmandel* Point 8 deg. and 45 minutes East; this Cape is high Land, to be seen in clear Weather at least twenty Leagues. From

this Cape runneth in a Bay to the Northward, in which is good Soundings, and good holding Ground as Clay and Oazy, as is round the Cape, but deep Water. This Bay is at least ten Leagues over, where you may anchor in what Depth you please; but when shot over the Bay, it is as the other part of *Arabia*, steep and high, and in many places no Ground. From Cape *Fortuack* to the Bluff Land, which is fair by *Dofar*, the Course is NE. and by E. 44 Leag. from the Bluff-Land into *Dofar* Road ENE. half N. distant ten Miles; as soon as you are up with this high Land you will see *Dofar*, which is a small Town seated amongst Trees; to anchor in the Road which is no more but a straight shore, as you may see by the Figure that follows.



A Scale of two Miles

1 1 2

Anchor.

Bring the Bluff-Land to the Westward to bear W. by S. and the Eastermost Point, which is large and low, E. half South, or the highest House in the Town NNE. Easterly, distant from the shore 1 Mile, Depth five Fathom 4 hard Clay Ground, which is the best of the Road: But 18 or 19 Miles to the Westward, is good Anchor or holding Ground all along the shore, 12, 15, or 18 Fath. 2 or 3 Miles off: About 8 or 10 Leagues to the Eastward of *Dofar* lies *Maribatt*, where many Ships have gone when they have lost their Passage, which is reckoned a good Road for the Easterly Monsoons, but of this I must leave till further Experience; here is no certain Tide all along this Coast; yet the Water shall rise and fall at certain times seven or eight foot; Streams runneth as the Wind bloweth, without it be sometimes at Full and Change, and then for three or four Days it shall run very strong to Windward, which was a great help to us, when we lost our Passage; many that are Strangers in such a case, will be afraid to keep the Shore on Board, which they must do if they intend to get to the Eastward, which may be done without danger; the Wind seldom bloweth hard on the shore in the Easterly Monsoons; the People are not to be trusted in many Places, but at *Shabar*, *Kaisun* and *Dofar*, and upon the latter you must have a good Eye; for they are not real Friends to the Christians. From *Maribatt*, the Coast lieth along NE. by N. to Cape *Rosulgat*, the distance between them, about 120 Leagues, all Full of Rocks and Shoals.

Cape *Rosulgat* is the Eastermost Point of all *Arabia*, it lies in the Latitude of 22 deg. 20 min. The Coast is very mountainous with several sandy Bays to the Westward of it, if bound from hence to *Muscat* or *Gombaroon*, you

must if possible, keep the shore on board, especially in the Months of *April*, *May*, or *June*; the Land stretches nearest North West by West; the shore is very bold, there is no Anchoring between the said Cape and *Muscat*, except at *Tegwel* and *Curiat*, and that so near the shore that a Pistol will carry to it. The Land about *Curiat* may be seen in a clear Day, at least 25 Leagues off.

From Cape *Rosulgat* to *Muscat*, the Course is NNW. about 27 Leag. *Muscat* lies in the Latitude of 23 deg. and 35 min. The Town is encompassed with a pretty high Wall, and it is accommodated with a tolerable good Harbour, large enough to contain fifty or sixty Sail of Ships. One Mile without the Harbour is no Ground, and half a Mile off is 35 Fath. but in the Harbour is but three and a half and three Fath. clean Sand. *Muscat* is best known by the Islands that lie about two Leagues to the NW. of it; as also by several Watch-houses that appear white on the Black Hills or Rocks, which Hills or Rocks this Country abound with, and in forty Leagues there is hardly a Tree or Shrub to be seen along the Sea-Coast, yet it is a very plentiful Country, abounding with Sheep, Goats, &c.

Directions for those that are bound from Surrat to the Gulph of Persia.

When you set sail from the Bar of *Swally*, take the Shoalings upon the shore, at eight or nine Fathom, and so keep down along till you are almost as low as the high Land of *St. John's*, which is in the Latitude of 19 deg. 50 min. or thereabouts, and sheweth as the Figure underneath.

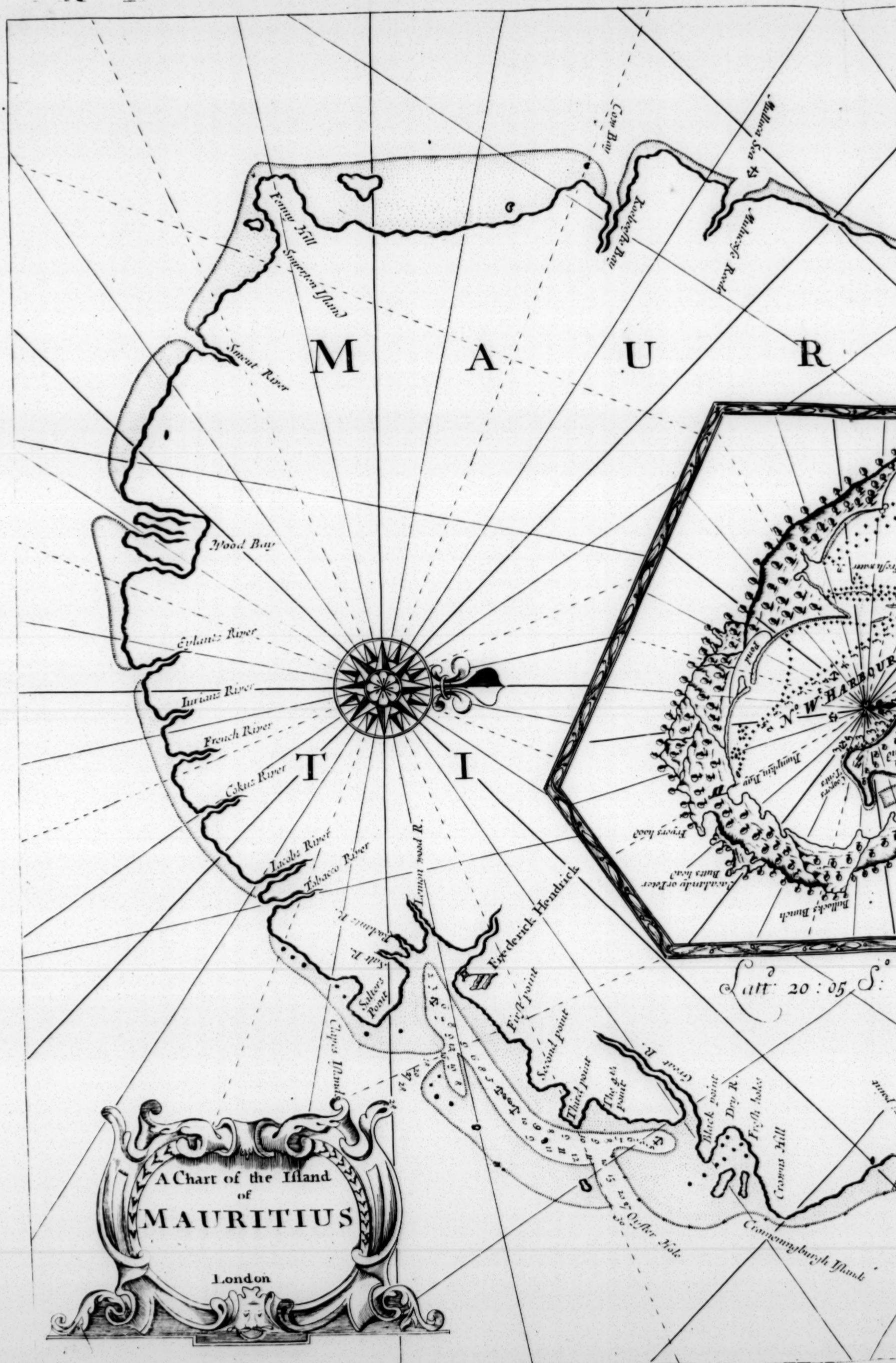
In this Form appears the High Land of *St. John's* bearing SE. 4 Leagues off in 17 Fathom.



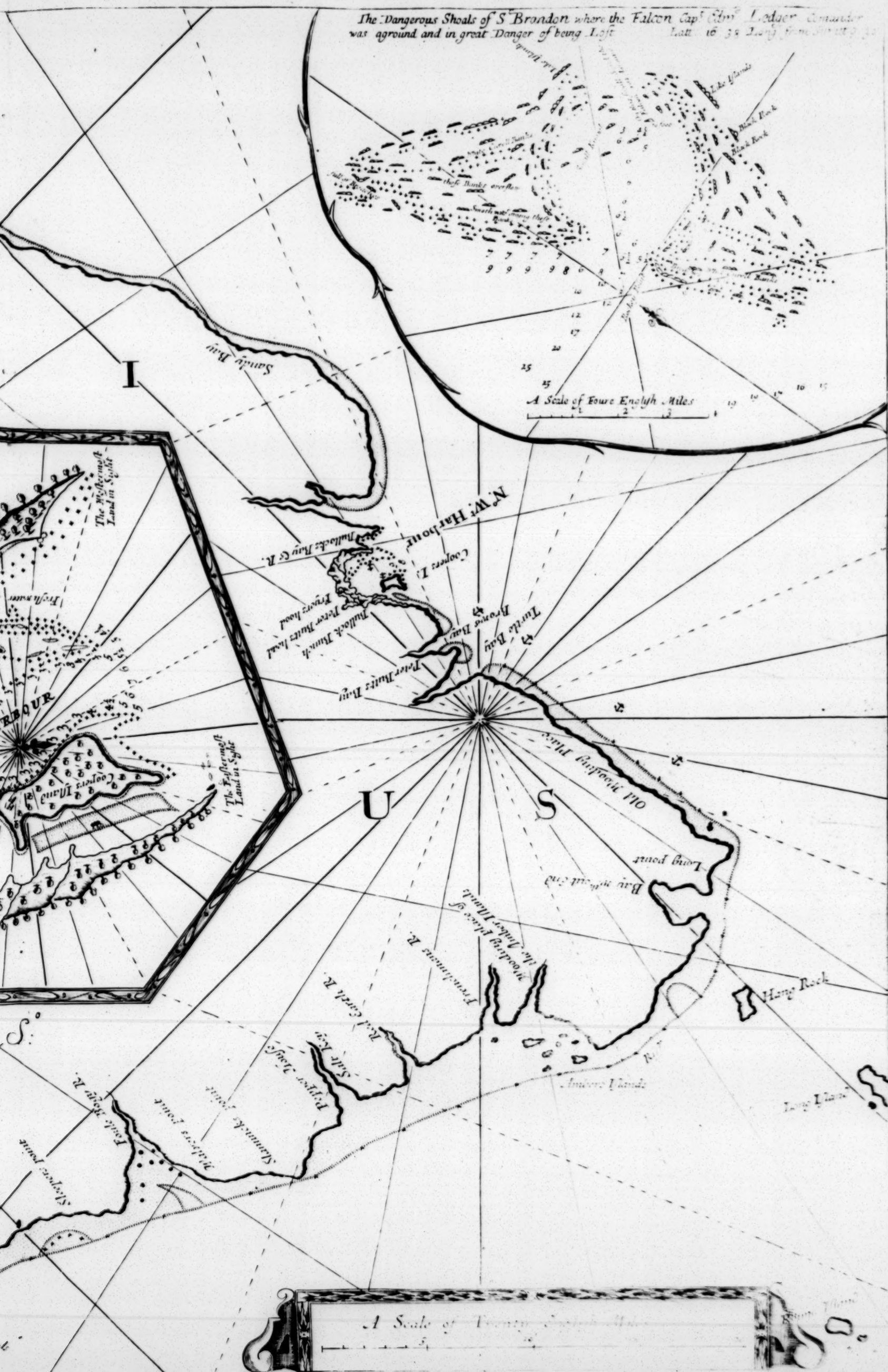
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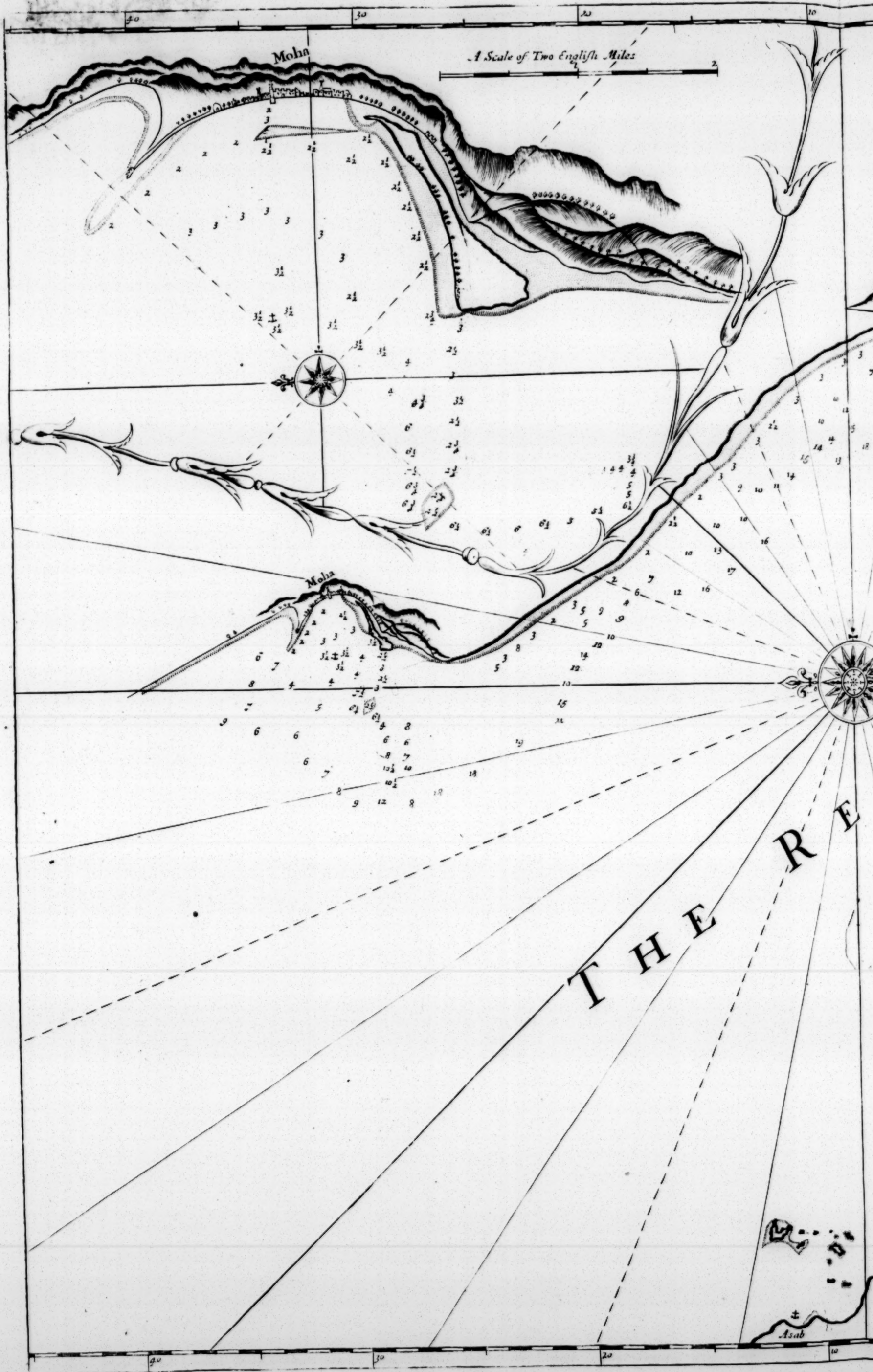
Map Room Cat

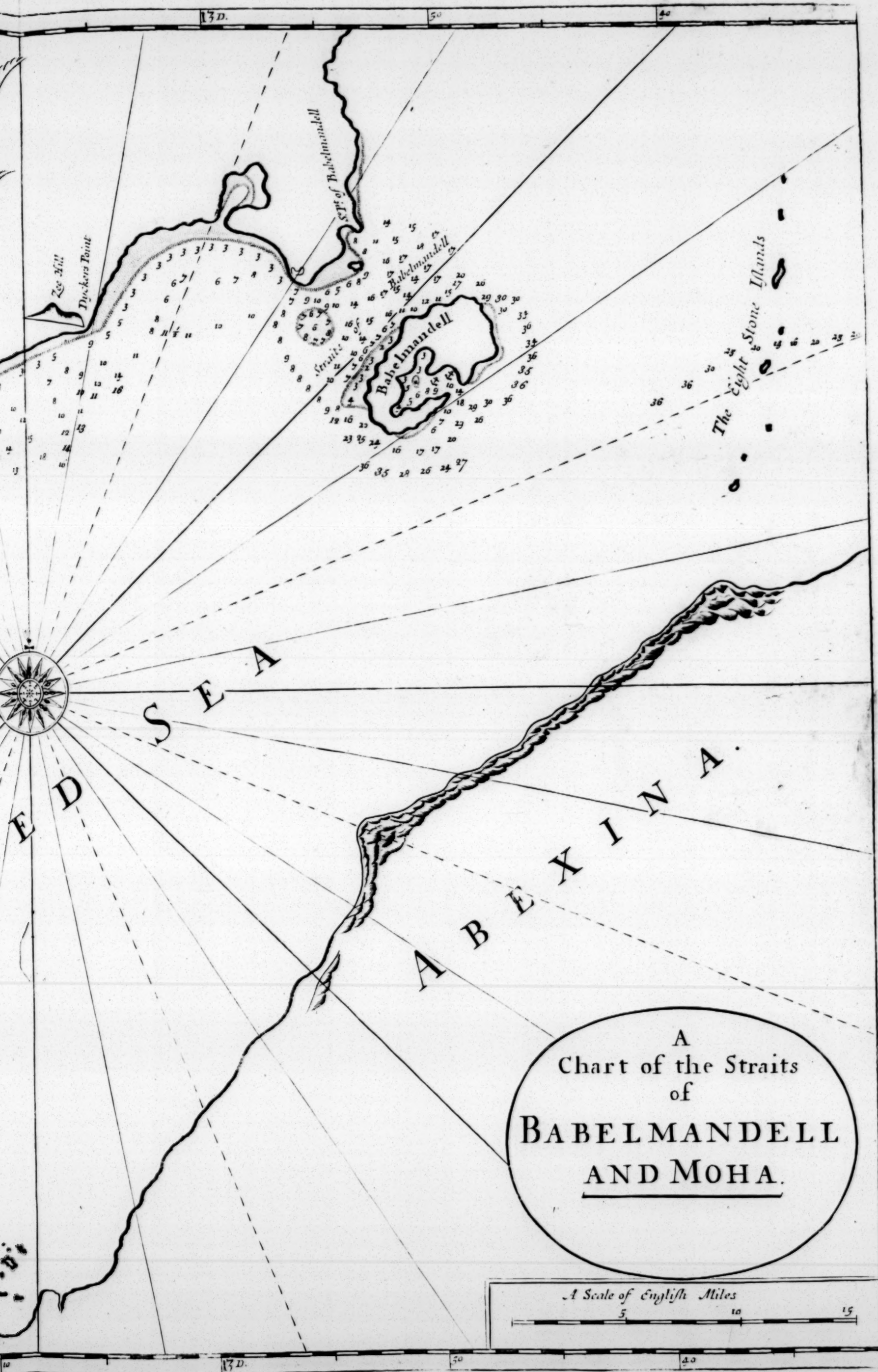
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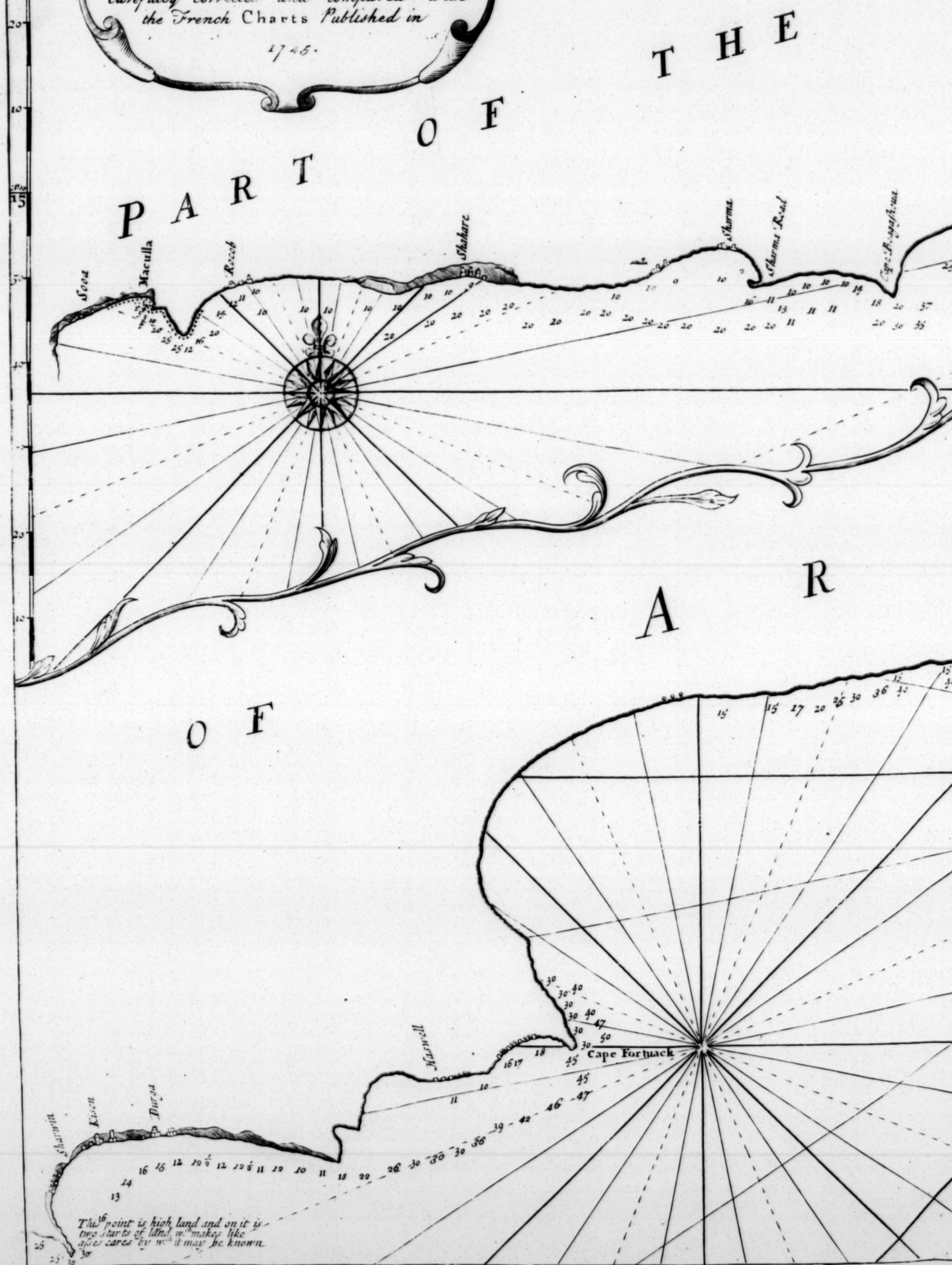
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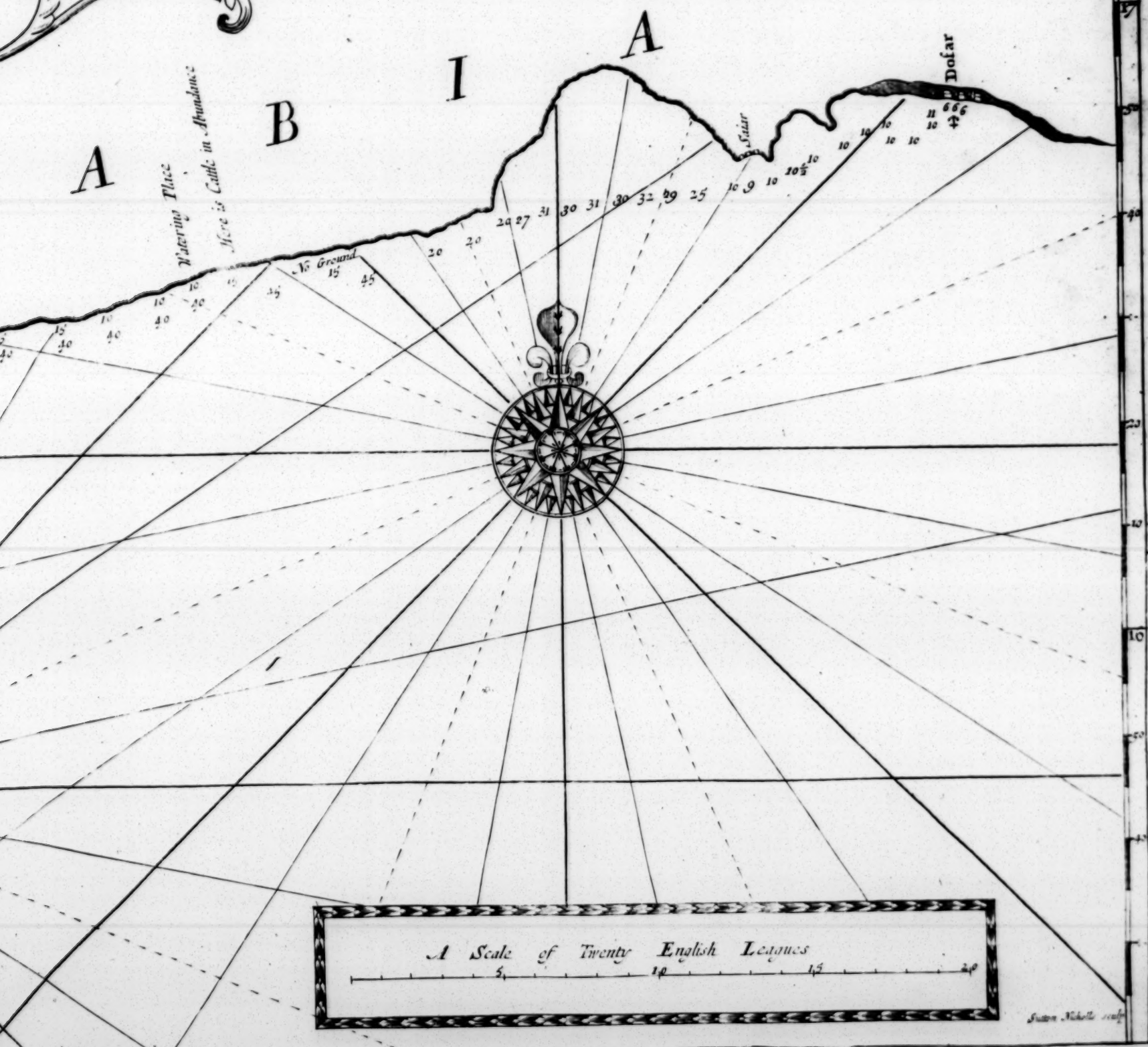






A Large Draught of the Coast of
ARABIA
from Maculla to Dofar
Carefully corrected and compared with
the French Charts Published in
1745.



[illegible]

When you have brought the said Land to bear ESE. from you, being in 12 or 14 Fathom Water, and having some part of an Ebb, you may steer over NW. for the Head of *Diu*, which lies in the Latitude of 20 deg. 40 min. and is distant from the former Land about 32 leag. if you have a fresh Gale of Wind, this Course will carry you clear of the Southern-end of the Sands, which lieth

in the Latitude of 20 deg. and 20 min. and about 10 Leag. off the High Land of *St. John's*; your depth, going over, will be between 15 and 18 Fathom.

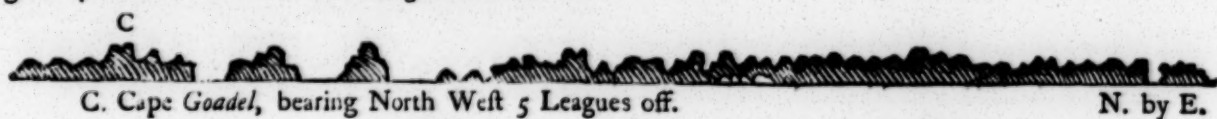
To the Eastward of *Diu-head*, 4 or 5 Leag. there is a high Hill rising as is described below, when the said Hill bears NNW. 8 Leagues off, you shall have 18 Fathom hard Ground.

In this Form appears the High Land to the Eastward of *Diu-head*, bearing North North West, Westerly, eight Leagues off, eighteen Fathom Water.



From the Head of *Diu*, your nearest Course is NW. by N. for Cape *Goadel*, which lies in the Latitude of 25 degrees 40 minutes North, and Longitude from the

Meridian of *Diu* 6 degrees 10 minutes, or near thereabouts, and sheweth as the Figure underneath.

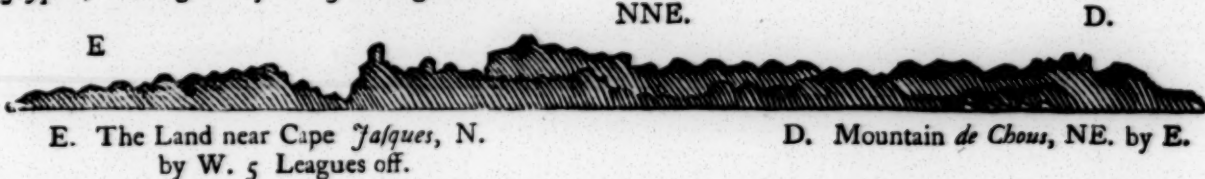


Before you come to Cape *Goadel*, if the Easterly Monsoon leaves you when you cross the Tropick, and you meet with the Winds at WNW. and NNW. variable, your best Course is to stand in for the Shore, and so ply it up, because there you will have the Land Breezes in the Night, and the Sea Breezes in the Day many times; and also a Current setting to the Westward, until it meet with the Current of the Gulph, which setteth off SSE. I do not know of any Danger along the Shore, but stand not in too near it in the Night, for there is in many Places very low Land, which lieth very far off from the high Land, and cannot well be discerned in the Night, till you are very near it, and the Water deep, except it be very near the Shore.

From Cape *Goadel* to the East point of the Road of *Jasques*, the Land lieth W. and by N. and East and by South, the Variation being allowed, the distance is above 80 Leagues.

The Eastern Point of the Road of *Jasques*, lies in the Latitude of 25 degrees 30 minutes N. and Longitude from the Meridian of *Surrat* 12 deg. 30 min. W. The Land is very low.

When you are within 20 Leagues of the Road you will see a very round Hill called *Mountain de Eboures*, it hath in the Middle thereof a little Swamp, there is not such another Hill on all the Coast. This Hill is distant from the Road or Point of *Jasques* about 8 Leagues, and standeth up in the Country from the Sea-side, and sheweth as is underneath.



Note also, That when you are in the Offing, and have the Hill F North off you, then the Eastern part of the Road is North also.

If you keep the Hill marked with the Letter G North, you may go right into the Road in 4 Fathom and a half or 5 Fathom Water off the low Point, or when

you have the Gapp X in the double NNE. the Eastern Point of the Bay is NNE. also.

Cape *Jasques* with the Land adjoining thereto sheweth as underneath described: The Eastern Point of the Bay is very low, and hath standing thereon a little white House, or Pagod.



The Cape itself is a very low sandy Point, whereon standeth a white square Cliff, like a Tomb, standing in the Sea, but the Cliff is not seen as you ride in the Road.

In this Bay there is very fair Shoalings all over the Ground, soft and Oasie, except it be near the Shore, or the Eastern Point. To the Northward of this Point above five Miles, there is a small River into which a small Ship that draweth not above ten or eleven Feet Water, may go and ride as safe as in a Dock, where you have four Fathom and a half at low Water, and ride Landlock'd, and also lay her side to the Shore; there is upon the Bar of this River at low Water but five Feet, it doth rise seven Foot and a half or eight Feet upon the best of the Spring, it floweth NE. and SW.

Directions between Cape *Jasques* and *Gambarone*.

From the Point of *Jasques* to the low Point of *Bombarick*, the Course is North West by Compass; about seven Leagues, between these two Points is good Soundings from twenty to five or six Fathom, if you keep the *Persian* side, but over on the *Arabian* is deeper Water, the Point of *Bombarick* is a low sandy Point, as is also the Point of

Jasques. Point *Bombarick* hath a Rock or Hommock on it resembling a Castle, N. by W. half W. by Compass. From *Bombarick* Point, lieth a shoal Point off from the *Persian* Shore, about three Miles; on this shoal you have not above four Fathom, and if you be within two Miles of the Shore, you will not have above three Fathom. This Shoal is steep too, there being 24 Fathom within half a Mile of it. This shoal, in the Day, may be seen very plain by the Change of the Water, but in the Night it is dangerous, therefore to avoid it, come no nearer the Shore than twenty Fathom, till you are past it, then may you borrow on the Shore all along in ten Fathom or less, as you shall think fit, for there is no danger to be feared.

From *Bombarick*, or Cape *Jasques* Point, to the Island *Ormuse*, the Course is North by West half West, about thirty Leagues. Cape *Jasques* lies in the Latitude of 25 deg. 38 min North.

From the South-side of *Ormuse* to *Gamberone*, the Course is NW. half Northerly, about twenty Miles between *Ormuse* and *Larack* Island, there is no Danger, if you fail between the Island of *Ormuse* and *Larack*, give the SW. Point of *Ormuse* a good Birth, it being shoal a pretty way off.

off, near two Miles, and steep to ten fathom, within two Cable's length of it, and upon it in some places three Fathom, or with small Ships you may go between *Ormuse* and the Main in four and five Fathom.

Now let me advise you in your return back again when you come from *Jasques*, and are bound for *India*, keep a fair Birth off shore, in 24 deg. 30 min. or thereabouts, till you are within sixteen or twenty Leagues of the River *Sinda*, for while you continue without the Tropick, the Wind will be Northerly, and within Easterly, as has been found by Experience, in the Months of *November*, *December*, and *January*; besides there is a great Current that setteth to the Westward continually, for if you cross the Tropick, before you are gotten so far as within 16 or 20 Leagues of *Sinda*, you will not be able to fetch the Land of *Diu*; when you think you are within the aforesaid Distance of *Sinda*, steer away SE. and SE. by S. using your Lead in the Night; and when you come near the Land to the Westward of *Diu*, in Latitude of 20 deg. 50 min. you will have 28 Fathom Water, black Oazy Ground 8 Leagues off the Shore, the Water thick and full of filth and slime, with some Snakes, and things resembling Snake Skins.

In the Latitude of 20 degrees 20 minutes, *Diu-head* bearing North, you will have 27 Fathom Water, soft Oazy Ground.

Note, That all these Courses and Bearings of Islands that is here mentioned in the Description between *Surrat* and the Gulph of *Perfia*, are by the Meridian Compass without respect of Variation.

River Cinda or *Sinda*, lies in the Latitude 24 degrees 45 minutes, Longitude from *Surrat* 5 degrees 30 minutes West, the Land to the Southward shews very low, and three or four Miles off the Shore, there is not above four or five Fathom Water hard Ground. The *River Cinda* hath a Bar at the Entrance of about thirteen or fourteen feet at high Water, the Mark for coming in is a white Monument, which will shew it self about four Miles off; bring this Monument to bear North East from you, and steer directly with it till you come to the foot of the Bar, where, on occasion you may Anchor in three or three Fathom and a half, and then the aforesaid Monument being brought NE. half E. you may go over the best of the Bar, steering NE. by E. The first place of Trade when you are over the Bar, is *Laribundare*; but the chief place of Trade, is up in the Country, called *Tatta*, which is a large City.

Diu lies in the Latitude of 20 degrees 42 minutes, it is a good Harbour, there being three fathom and a half, the Harbour is between the Island and the Main, but the going in is very narrow; it was formerly the Metropolitan City of *Guzzarat*, but now of little Note; there is no other place of Trade on this Coast except *Gogo*, which lies ten Leagues up the Gulph of *Cambaya*.

Between the Point *Dant* and *Juge*, the Land is clifly and reasonably high to Seaward, and very high and Mountainous in the Country; also between these two Places the Shore is bold, but to the Northward the Land is low to the Sea-side, and Mountainous within, and if you come within a Mile or two of the Shore, having the Mountain to the SW. of *Gogo* high Land NW. by W. take care of a Ledge of Rocks to the Southward, which lieth there sunken. About this Reef-head runneth very little Tide; but near the Shore, and especially thwart the Island of *Peram*, the Tide runneth very swift, setting as the Land lieth, and riseth about four fathom; when you have sight of the Island of *Peram*, come no nearer the Shore than to bring the Island North by East. In the Road of *Gogo* runneth no strong Tide, by reason of the Island and other shoals, which at low Water, may be seen; it is full Sea on the full and change Days about four a Clock, and floweth about four Fathom.

Gogo lies in the Latitude of 21 deg. 33 min. North; it lies N. by W. from *Dood Point* at *Gundeek*, which is the Westernmost Point of the Gulph of *Cambaya*: To the Southward of the City is a small low Island, which is a good Mark to know the Road by, called *Peram*: When you have brought *Peram* Island to bear West about three Miles from you, steer in North West for the Road, which is deep enough for Ships of the largest Burthen, where you may Anchor in three Fathom and a half Water, about two Miles from the Shore; here the Tides run very strong, especially at the Spring Tides.

Marks for Surrat.

The Marks for *Surrat* are a great and broad Tree, and a white House to the Southward of *Surrat*, named *Pogode*, which is a little Mile to the Northward of the Tree, in one. The River doth not shew it self until you are open of it, for

it is very low Land and full of Trees, you will see the Trees before the Land: three Leagues from the River of *Surrat* is *Swalley*, or *Swalley-Hole*, and to come to an Anchor, bring the two Stacklis Trees SSE. and An. or in eight Fathom, by the Bar, upon which is three and a half Fathom.

From *Surrat* to *Deman* your Course is SE. by S. by a Meridian Compass about sixteen Leagues.

Thwart Marks to sail into Bombay and find the sunken Rock.

First, Observe the seven Trees above *Malabar-Point*, are on the highest Land of *Bombay*, which Trees are divided three of them to the E. ward, and the other four to the W. ward of the opening between them, and also take notice of a single, and the tallest Cocoa Nut Tree upon *Old Woman's Island*, which Trees being brought in the opening between the seven Trees brings you upon the sunken Rock, or, if you bring the single Tree, standing on the highest Land of *Bombay*, upon the middle of the second Row or Range of Trees on *Old Woman's Island*, brings you as before, these being the thwart Marks to find the Danger.

Secondly, To avoid this Rock, or to know when you are to the Northward or Southward of it, bring the great Tree upon *Old Woman's Island* to the Westward of the seven Trees, and then you are certainly to the Northward of the sunken Rock; and if you be to the Eastward of the seven Trees, you may be sure that you are to the Southward of it, these being the proper and best Marks.

Thirdly, The longest Mark, together with the first and second Observation, to find this Rock, is the old House of *Mazagon* (being square and without a Roof, and stands on the side of *Mazagon-Hill*) upon the Neck of the NE. Bastion of *Bombay*, which will certainly bring you to find the Rock.

Fourthly, To go to the Eastward of this Rock, bring *Mazagon-House* just open to the Eastward of the flanked and Easternmost Angle of the North East Bastion, to keep it till the great Tree is to the Westward of the seven Trees and you will be to the Northward of the Rock; or if you are bound out, bring the Tree to the Eastward of the seven Trees, and you are certainly to the Southward of this Danger, which Mark you may safely sail by.

Fifthly, To go between the *Oyster* and *sunken Rock*, which is a clear Channel, and at Low-water four fath. from Rock to Rock, within two Ships breadths, also three Fathom at the Rocks side. This Channel is Oazy, and by estimation one Mile broad, the longest Marks is *Mazagon-House* shut in behind the highest part of *Bombay Fort*, upon which Mark you may depend for your safety.

Sixthly, The Mark to find the middle Ground, keep the House standing upon the East point of *Mazagon*, just on the West side of *Garlick-Hill*, (being green and higher than any of the nearer Land of *Bombay*, by which it may be easily known) and the high Tree of the range of the East side of *Bombay*, just open to the South Westward of *Bombay Flag*, brings you upon the Danger, whereon is not above five foot at low Water, and very unequal depths near it, and said to be Sand, but by experience is found to be unequal Rocks, and is in breadth and length as is laid down.

Seventhly, To sail clear of the sunken Rock into *Bombay Road*, bring the House upon *Mazagon Point*, upon the East of *Garlick Hill*, but rather half the House open to the Eastward of the Hill, that so kept will conduct you to the Westward of this Danger; then you may borrow and come to an Anchor, the Union Flag bearing NNW. a large half Mile at low Water, Depth four Fathom and three quarters, Oazy Ground.

Eighthly, This sunken Rock is at the top of it, no bigger than the Head of a quarter Cask, within 40 Foot round about, and is no more than 3 Feet at low Water, at which time, in the Wash of the Sea, our Yaul struck upon it with her Bow; the rise of the Water is here about 17 Feet.

Bombay is in the Lat. of 19 deg. 00 min. *Henry Canary* is in the Lat. of 18 deg. 51 min. and lies from the Fort S. by W. half W. 11 Miles distant.

You Anchor in *Goa Road* 7 Fathom and a half soft Ground, the Westernmost Land in sight bearing North 3 quarters West, and a Light-house like a Lanthorn standing on the top of the Hill, within the Fort on the *Algarde E.* by N. half N. or the going in of the Rivers Mouth E. half N.

From *Goa* to *Carwar* the Course is SE. distant 12 Leagues, you Anchor when the Rocks of *Carwar*, called *Duckey*, bear NNW. half N. and a small Rock in the Road

Road open with the Island *India Diva*, N. by W. half W. distant 2 leagues, or you may anchor abreast of *India Diva*, the Body bearing N. E. by E. about 2 Miles and a half off, in ten Fathom and a half, and the S. Point of *Carwar*, N. by E. the Passage into *Carwar-Bay* is between craggy Rocks, alias *Duckey*, and the Island near the South Point, in which Bay on the South-side is a small Cove, the entrance into which is S.E. a quarter E. In this Cove small Ships may ride very securely Land-lock'd; near the Mouth or Entrance into it is 4 Fath. Water; there a Ship may ride it out, the whole Westerly Monsoon without any great Danger.

Note, You may go in or out on either side of *Duckey* Rocks, there being in the N.W. or S.E. Channel 7 or 8 Fathom oazy Ground.

From *Calicut* to *Calicut*, the Course is S.S.E. distant about 70 Leagues, Latit. 11 deg. 00 min. North. When *Calicut* bears N.E. by N. about three Leagues distant, you will have 13 Fathom oazy; you cannot see the Town at this distance without a Prospect Glass, wherewith it appears fair and large, and to the Northward of it are three white Spires, standing at an equal distance one from the other, by which this Place may be known.

You may anchor in *Calicut* Road in 5 Fath. soft oazy Ground, the four Tombs to the Northward of the Town bearing E. N.E. one quarter N. and the Northernmost Land in sight, which makes like Islands, N. by W. half W. you being about 2 or 3 Miles off Shore.

In the Latitude of 11 deg. 29 min. North, lies the sacrificed Rock, N. E. by E. a Mile and a half from it is fifteen Fathom Water oazy. This Rock is about a League from the Shore, it is only a Stone Reef, and reasonable high; it may be seen at least 4 Leagues off, and is thought safe for any Ship to sail between it and the Main.

The Course from the sacrificed Rock to *Cochin*, is S.S.E. distant 33 Leagues. The City of *Cochin* lies in the Latitude of 9 deg. 56 min. as you come from the Southward it makes but a small show, only a few Houses at the North-end with a Flag-staff, and Windmills to be seen; the other part is hid with Trees within the Wall, which Wall at a distance seems to be the bounds of the Shore; the Land both to the Northward and Southward, is low and full of Trees; up in the Country is high Land, but commonly cover'd with Clouds, and if not, is no ways remarkable; on the North side of the City is a Reef of Sand, which stretches about half a Mile from the Shore, the Water shoaling gradually to three Fathom and a half, and just without the Reef is oazy Ground, a Ship of any Burthen may ride in 6 or 7 Fathom, about 2 Miles from the Shore, bring the Town to bear E.N.E. or N. E. by E. or the Windmill and Flag-staff shut in one. When you are to the Northward of the City, it makes a grand Appearance. The River shews like a very fine River, but is not at all safe at any time. At Spring Tide there is fourteen Feet Water on the Bar, and it Ebbs not above four Feet. Provisions are here very plenty, as Hogs, Hens and Ducks, which are very good, also here are Cows but very small and lean.

From *Cochin* to *Anjengo*, the Course is S.S.E. distant 60 Miles, which lies in the Latitude of 8 deg. 50 min. You may anchor in 11 Fathom, the Flag-staff bearing N. N. E. and the Northernmost Land in sight N. N. W. half W. or you may anchor with the Flag-staff N. E. half N. and the Northernmost Land in sight N.N.W. half W. about 2 Miles off Shore. Here the *English East-India* Company have a Factory.

General Instructions for sailing from Cape Bonas-Esperance to Surrat, without the Island of Madagascar, from August to December.

From the Cape you ought to steer S. S. E. till you come into the Latitude of 37 or 38 Degrees South, in order to meet with the Westerly Winds.

Being in the abovesaid Latitude, you ought to shape your Course East, or nearly so, keeping it till you have made about 61 or 62 Degrees of Longitude from Cape *Bona Esperance*, endeavouring in your Passage to get sight of the Island of *St. Paul* and *Amsterdam* (which lie in the Latitude of 38 deg. 00 min. and Longitude from the Cape about 57 deg.) it being of great Importance for the shaping of your Course afterward; being arrived in 61 or 62 Degrees of Longitude, as aforesaid, you must steer North North East, till you come into fifteen Degrees of South Latitude, and are about 71 or 72 deg of

Longitude from the Cape, from hence steer Northward to cross the Line, and continue your Course till you come into 7 Degrees of North Latitude, minding to keep the aforesaid Longitude of 72 deg. taking great Care that you are not thrown to the W. ward by the Current that sets out of the Bay of *Bengall*, and being arrived in the abovesaid Latitude of 7 degrees, and 72 degrees of Longitude, you must steer West to get sight of the South East end of the Island of *Ceylone*, and being in sight of the said Island, and in the Latitude of 7 Degrees you are to the Northward of the *Abafes* or *Bassiafer*, which are two parcel of Rocks, lying the one in 6 deg. 10 min. and the other in 6 deg. 25 minutes, in sailing from hence to the Southward, if in the Night, you must not keep less than 3 Leagues off the Shore, in which Offing you will find no less than 25 Fathom; but in the Day-time you may keep the Shore aboard, these Rocks shewing themselves by their much breaking, may be easily avoided; between the Shore and *Bassias* the great, is eleven and twelve Fathom sandy Ground; being to the Southward of these Rocks, you may keep the Shore aboard by Night or Day, till you come near Point *d'Galla*; you must keep in twenty-four Fathom by Day, and thirty by Night, for to the Southward of the said Point runs off a Ledge of Rocks about a Mile and a half into the Sea; as soon as you have doubled the said Point *d'Galla*, there being no other Danger, you ought to keep the Shore close on Board, till you come as high as *Columbo* (which is the chief Place on the Island, it lies in the Latitude of about 7 deg. North) before you cross over for Cape *Comaroon*, for the North Easterly Wind blows fresh, and the Current between *Tuttacorine* and *Ceylone* sets extraordinary strong to the North Westward: If by any shifts of Wind, or occasion of the Current setting out of the Bay of *Bengall*, or any Accident you fall in with the South-end of *Ceylone*, or the West-side as high as *Columbo*, or thereabouts, there is no Danger, for you may boldly come near it in 2 Fathom Water; but as the S.W. Point of the Island lies in 5 deg. 50 min. North, you ought to have a great Care to make the Island if possible, on the S.E. side, in about 7 degrees as aforesaid, for otherwise it may happen that the Current which sets strong to the Westward, may occasion the loss of your Passage.

From *Columbo* you must steer N.W. to get sight of Cape *Comaroon*, which lies in 7 deg. 42 min. Lat. North; the Cape is to be known at a great distance by several high Mountains, which lie to the North Eastward of it, the pitch of the Point itself is very low Land, as you come near it you ought to look out for two Rocks, which lie at the South West part of the said Cape, you may also know this Cape by a single high Mountain, which is right over it, and under that stands a great Range of Trees of an equal height. You may sometimes find it difficult to double Cape *Comaroon*, though you have it close aboard, by reason of a Wind and Current that sets to the S. ward, but you must take the Opportunity when the Currents are not against you, and anchor from 35 to 40 Fathom, until Night, when the Wind will come about to the E. and E. N. E. for in the Day-time near this Cape the Wind is always North.

When you are past the Cape, you ought to keep the Shore as close aboard as you can in twelve Fathom, and there Anchor till Night for a Land breeze, with which you may stand off to 30 Fathom, where you must anchor again to wait for the next Sea breeze; and when that comes, make sail along the Shore in twelve Fathom, there anchor again, minding always not to be under sail while the Tide of Ebb sets to the Southward.

From Cape Comaroon.

The next remarkable Place to the Northward, is a late *English* Factory, called *Anjengo*, it lieth in the Latitude of 8 deg. 50 min. as is before described, and is a little short of *Ceylone*, which belongs to the *Dutch*, whose Latitude is about 9 deg. North, and may be known by their Colours, with a Grove of high Trees which stand directly over the Port, before which lies the Road of *Ceylone*; but there is a Ledge of Rocks before it that must be avoided, by coming no nearer the Shore than in 12 Fathom Water, sandy Ground; and there you may anchor and wait for the Land breeze, which commonly springeth up toward Midnight, and with the first of it you must make sail, taking Care not to exceed 30 Fathom in the Offing, and there anchor again; and when the Sea breeze comes weigh and stand into seven Fathom soft Ground, where drop again.

Note,

Note. Between *Ceylone* and *Cochin*, you ought not to exceed the depth of 24 Fathom in the Offing, but Anchor in that depth to stay for the Sea breeze to bring you into the Shore again, and then you will have the benefit of the Land Breeze, which will spring up in the Night.

From *Cochin* and *Goa*, and along the *Mallabar* Coast as high as *Bombay*, the same Method is to be taken, viz. From about Midnight stand off with the Land Breezes till Noon, at which time the Sea Breezes will carry you again into seven Fathom, soft Oazy, and there you Anchor, always minding not to exceed twenty Fathom in the

Offing, carefully observing whether the Tide be for or against you, and making your utmost Endeavour every Evening to be near in with the Land, and every Forenoon off from it in the afore described Depths, in doing of which you will reap the Advantage of both Land and Sea Breezes.

To the North Westward of the Entrance of *Bombay* Road lies a Ledge of Rocks, which reacheth to the River of *Basseene* or *Bassene*, and lies in the Latitude of 19 deg. 35 min. North.

A Description of the Rocks, Sands, Shoals, Depths of Water, and Anchorage round the Island of Ceylone.

Manara. THE South-end of *Manara* lies in 8 degrees and 58 minutes North, and is to be known by some thickets of *Cocoa-Nut* Trees, which stand on the West-side of the River open to the Rivers-mouth; there is 13 or 14 Feet Water, but with Ships of Burthen you must Anchor a large *English* League to the Westward in 20 and 22 Feet Water; about a Cannon-shot from the Shore, there lieth before the River of *Manara* a Reef, stretching nearest South East and North West from *Arippe*; the South-end of the said Reef, and *Manara* River bears South West and by South half South, and North East and by North half North, distant four Leagues, the North-end thereof, and the River bears from each other West South West, and East North East four Leagues three quarters, it is a stony Reef of broken Rocks; there are three several Openings or Passages through it, but dangerous to be attempted by those that are not acquainted, because many times with a Southerly Wind it breaks all over, there being in the said Openings no more than 12 or 14 Feet Water to be found; so that it is best for those that are not well acquainted to sail round the Reef to the Northward or Westward, giving the said North-end thereof about a League Birth, and then you may sail on for the River, without Danger; for when you are once within the Reef you shall find the Water to shoalen gradually, from the said Reef towards the River, until you come into 13 or 14 Feet Water as above.

From Manara to Arippe.

The Course is South West half West four Leagues and three quarters, and the Land lies somewhat round in a Bight. *Arippe* may be known by a small Village wherein stands a *Portuguese* Church; about NW by W. from this Church lies a Rock some two Miles from the Shore, but small Vessels may sail between it and the Shore, there being eight, nine, and ten Feet Water; yet in the right fairway, there is fourteen, fifteen, and sixteen Feet, so that in sailing from *Manara* along Shore you must take Care not to come in less than fourteen Feet either to the Land, or Seawards.

Note. as you come from the Southward in sight of Land, about three Leagues off the Shore, and have the North-end of *Ceriodium* *Cakes*, the Point of *Good Ware* East from you, or something to the Southward of the East, you will have eighteen or twenty Fathom Stony Ground; from thence you must steer North North East and North East by North, until you bring the Church of *Arippe* East from you, in four or five Fathom, about three Leagues from the Shore, and steer NE. until you bring the Church SE. by E. from you; then will you plainly see the afore-said Reef break, and also the Rock to the Shorewards, from whence you may keep in a fair way, in the above-mentioned depths 14, 15, and 16 Feet.

But if you come from the Southward, in the fore-said Offing and Depths, with a Ship or Vessel, with which you dare not venture to go within, then you must steer North, until you come in sight of the Breakers, and to sail round the Reef, with that Birth in sight of them to the Westward. So you will have the Island *Manara* at first sight, North East from you; sail towards it as nigh as you can conveniently with your Ship. It becomes all those who come here to take Care of their Lead, keeping a good look out, and yet, if sailing towards the Island, from twenty to twenty-five Fathom depth, you chance to find it shoal two or three Fathom on a sudden at once, be

it nearer the Shore, or nearer the Reef you need not be startled, for if it be nearest the Shore when you come into 7 or 8 Fathom, you shall afterwards have all along good Soundings, the Flat gradually shoaling, until you come into 5 Fathom towards the Shore, sandy Ground; but if it be nearest the Reef in 8 Fathom Water, you will have stony Ground; you must come no nearer to it.

From Arippe to Caridien Island.

The Course is South West by West twenty Miles, and is high Land. This Island hath many Points, being of an irregular Form, it is about two Leagues long, and the Southermost Point, which lies in the Latitude of 8 deg. 26 min. is a red steep Cliff, looking as tho' it had been chopt off. Four Leagues from the Shore you have 8 or 9 Fathom stony Ground: When it is fair Weather and clear, you may plainly see the bottom coming from the Westward into fifteen and twenty fathom, about four Leagues and three quarters from the Shore, you will afterwards meet with uneven Soundings, so that if you come from the Westward as afore-said, you must keep the Lead going as fast as you can; yet you need not be afraid, altho' after your last mentioned Depth you shall happen to find in half a Glass no Ground, afterwards again no more than eight or nine Fathom, for when you come within three Leagues and a half ten Miles off the Shore, and you have a mind to go close under it, you will find it shoal gradually from the Southward eight or nine Fathom, until you come within one League of the Shore, there you shall find a Bank of pibbly Ground, on which is but three Fathom Water, being about two Musquet shot broad, when you are over that, you will have again five Fathom sandy Ground. At the South-end of this Island is a Bay, and lies about two Leagues from *Calpentyn*.

From the South end of Caridien, to the South-West Point of the Island Calpentyn.

The Course is South West four Leagues and two thirds, for matter of Sounding you have already had an Account of them; the aforementioned Ridge or Bank of three Fathom, reaches to above *Calpentyn*, and lieth within a Musquet-shot of the Shore, and also there lies above *Calpentyn*, about two Miles from the Shore, a Ledge of Rocks, which you may plainly see break; this South West Point may be easily known by a thick Grove, which stands upon it, for thereabouts is no such to be seen besides that, except upon the Main to the Eastward of the Point, there are also a parcel of *Cocoa-Nut* Trees, which may be about a hundred, and between those Trees and the bushy Grove, is a small Valley, but little shelter for a Westerly Wind, and besides all hereabouts, in with the Shore, is foul Ground, so that you cannot let go your Anchor without Danger of loosing it in any Place within the said Ridge of three Fathom Water, except about *Caridien*, or *Calpentyn*, and that in four or five Fathom.

From the Point of Calpentyn to Chiloa.

Your Course is South South West five Leagues and a quarter. From the South-side of the above mentioned Bay *Naverary*, begins a Ledge, or Spit of Coral-stone, and lies along Shore till within a League to the Northward of *Chiloa*, and there it lies full two Miles off the Shore; but you may easily discover it by your Lead, for you

From Arippe to Caridien. Lat 8deg. 26 min. the South-end.

The Bay is called Naverary.

From Calpentyn to Chiloa.

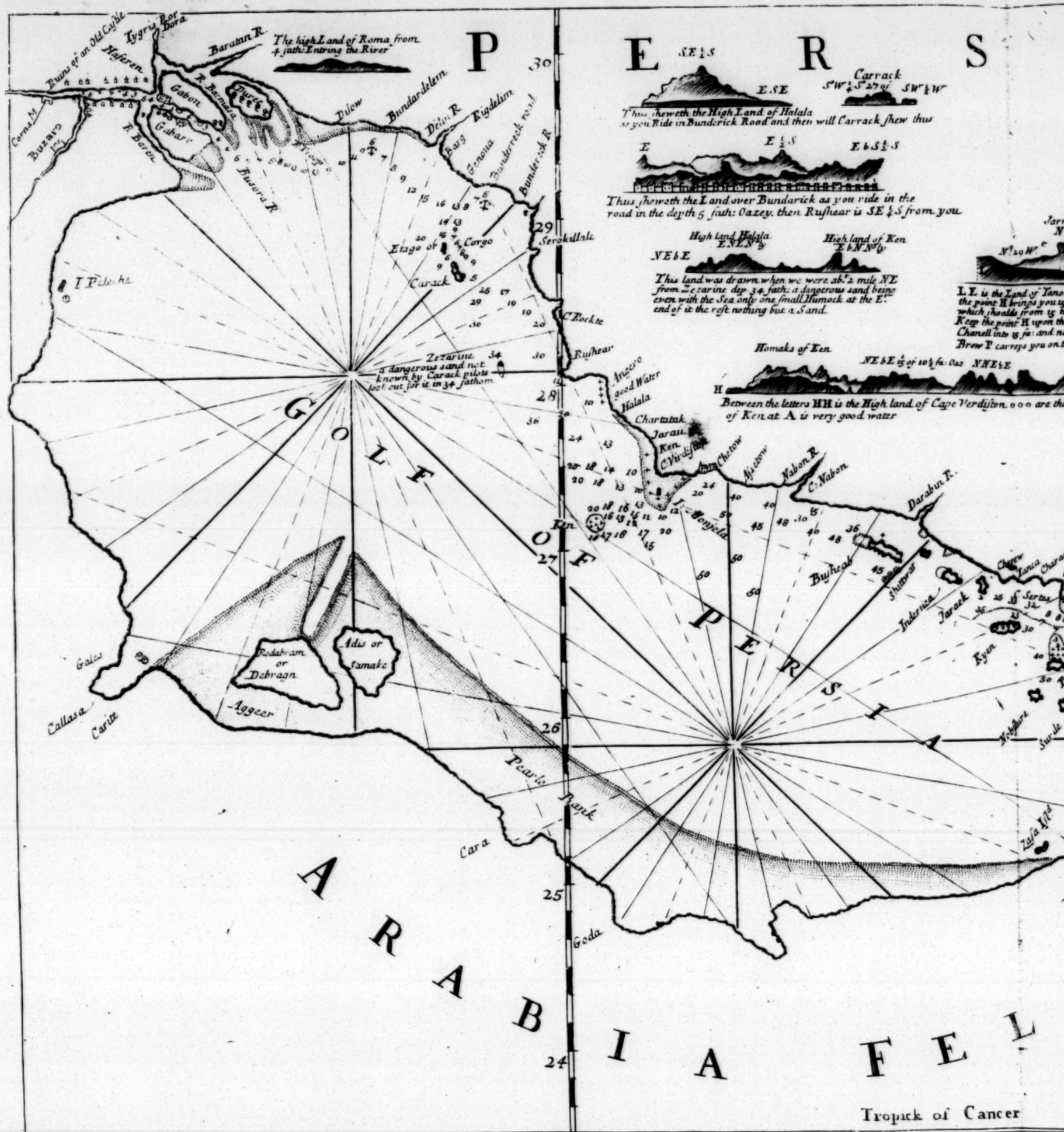
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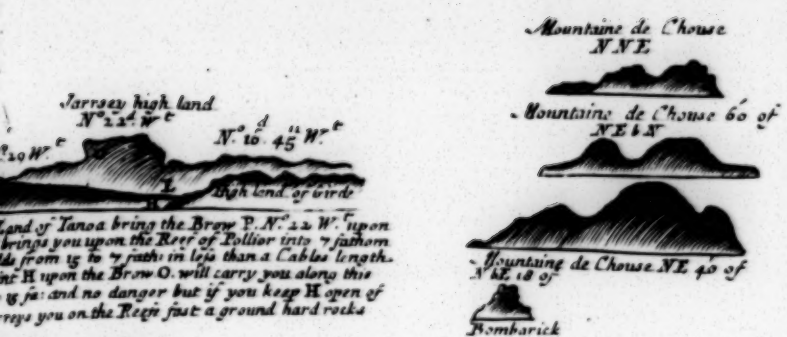
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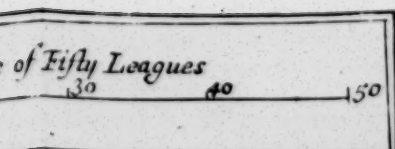
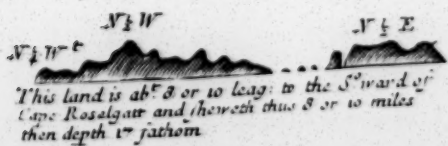
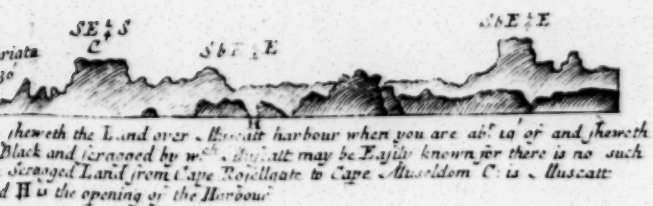
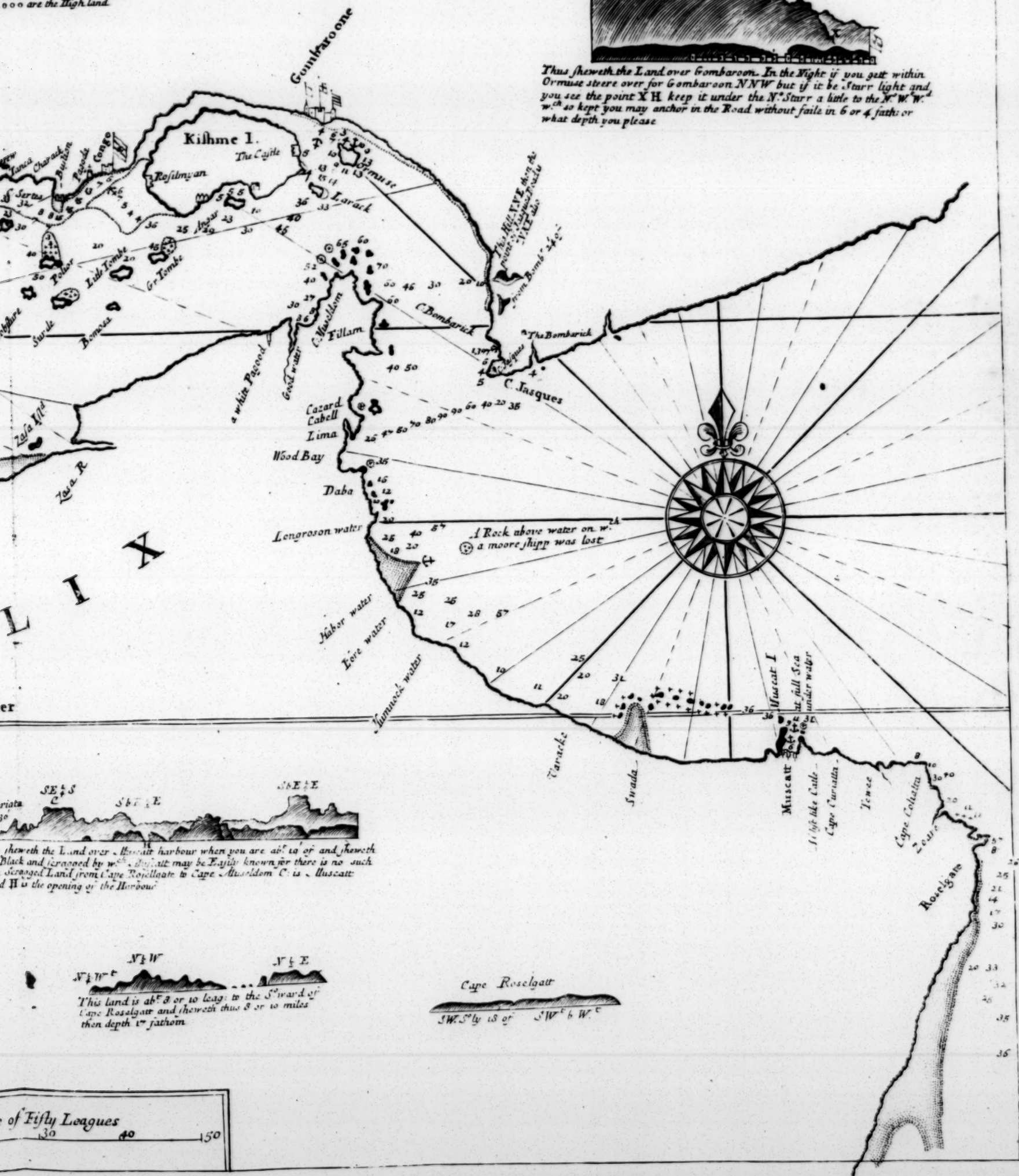
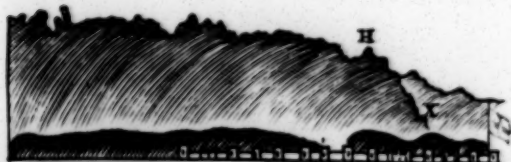
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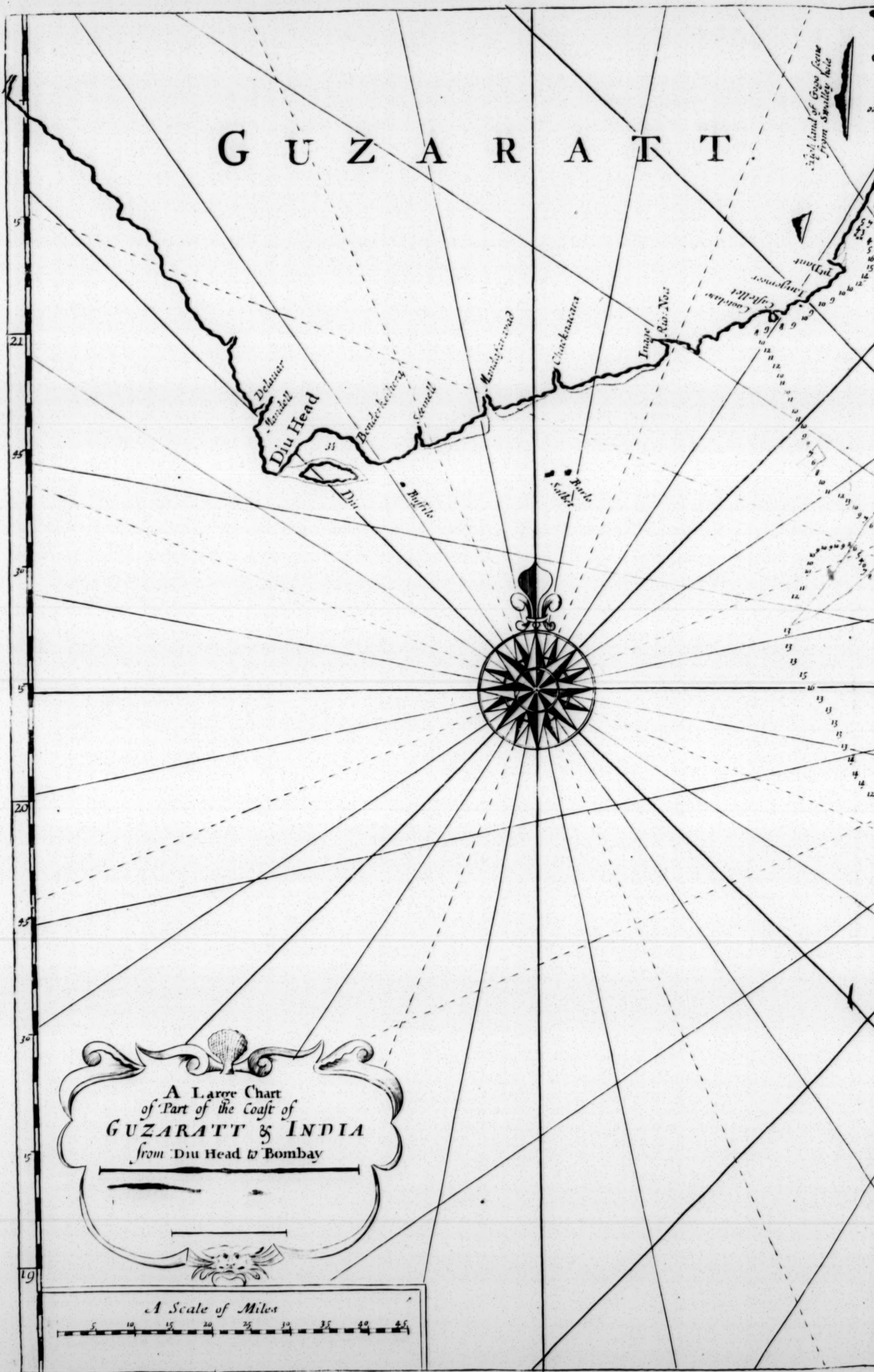
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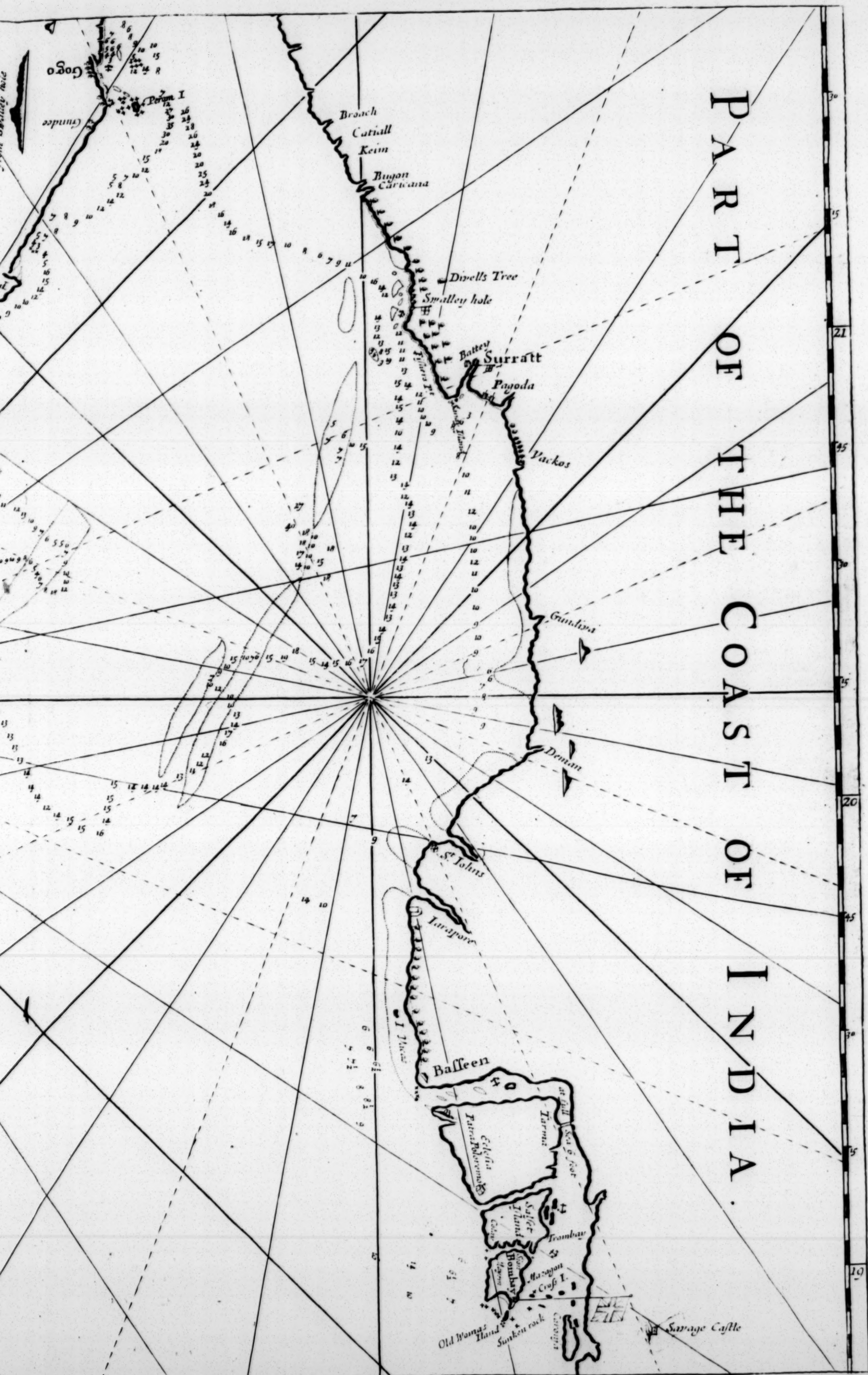
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 is a fort and the Sea flows abt it this land sheweth black and may
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GUZARATT

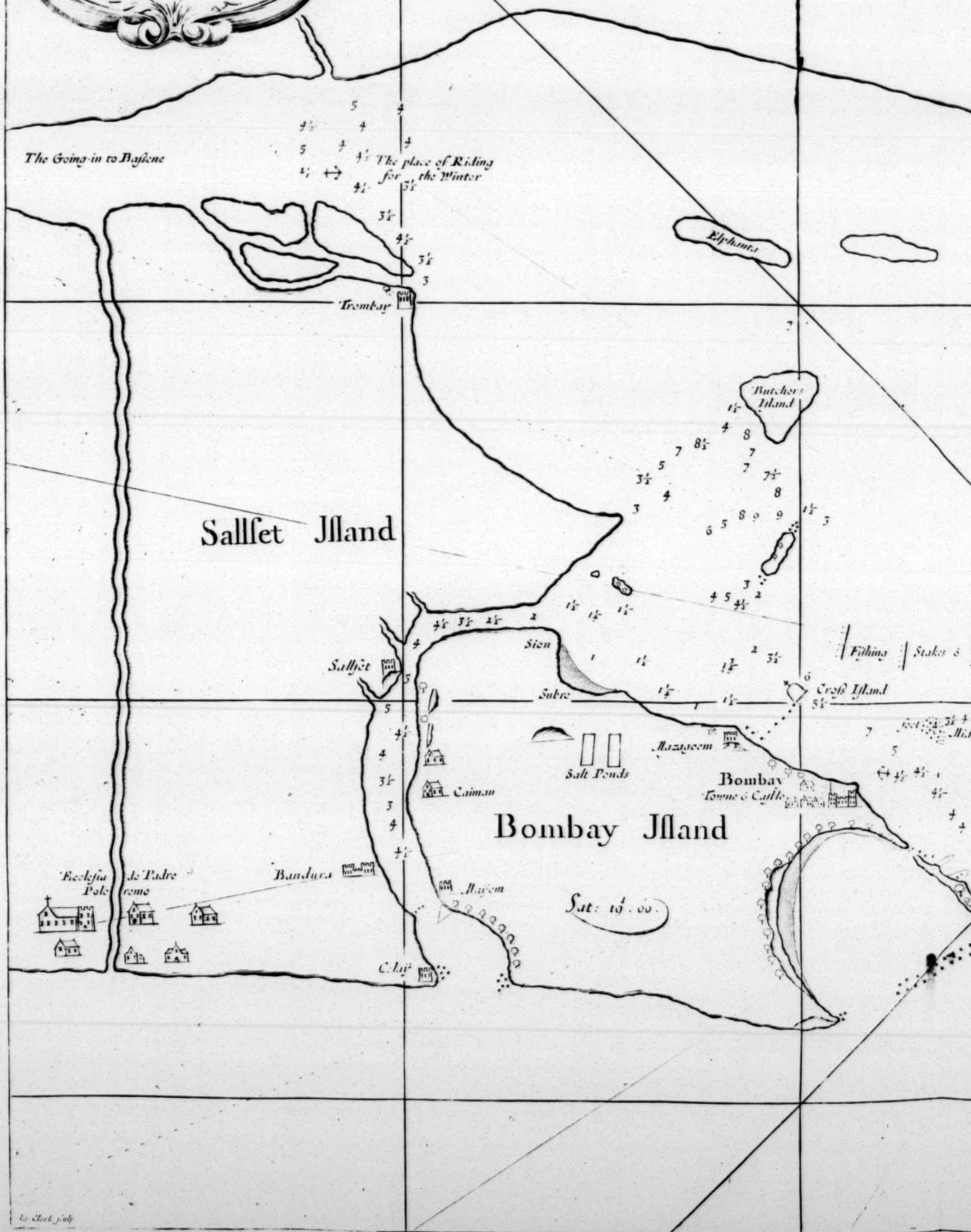


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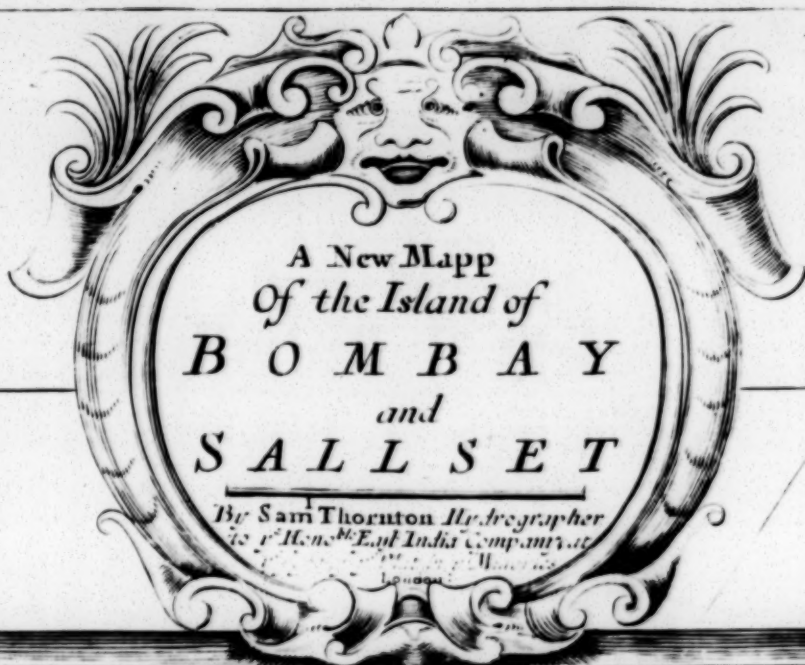




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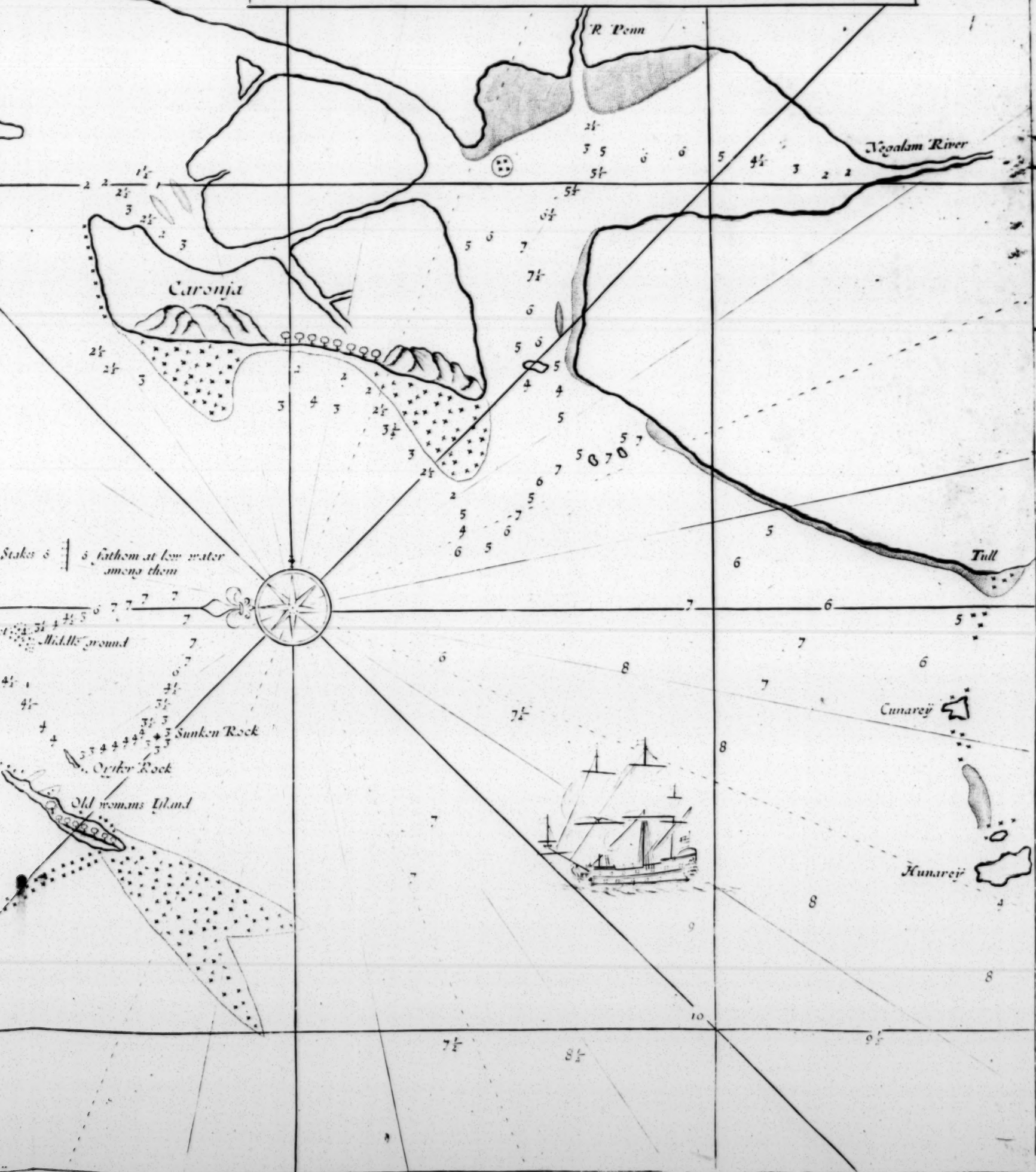


Savage castle



ST OF INDIA

A Scale of English Miles.



have clear of it Sandy Ground, and at least four Leagues off Shore, no more than eight or nine Fathom. The River is to be known by a Sand Hill, whereon there is some small Buttes, and within Land is a small round Hommock; coming from the Southward, you may keep the shore aboard until you come up with the River, but coming from the Northward you must bring the aforesaid Ridge or Spit two Miles a Stern of you before you get the shore aboard. The Soundings between *Calpentyn* and *Chiloe* are fine sandy Ground, now and then you may meet with a few Coral Stones amongst it, and sometimes a Scallop Shell, but the nearer to *Calpentyn*, the fouler the Ground.

*From the River Chiloe to Matteripe.
(or Morabel.)*

From Chiloe to Morabel. The Course is South and by West half West, between these two places you have deeper Water, and you may freely borrow off the Shore by your Lead. *Morabel* may be known by two or three Gardens of Cocoa Nut Trees, which stand a little in the Land, as you come from the Northward; the first as you see greatly resembles the Garden of *Nuverary*, upon *Calpentyn*, so that *Morabel* may be known by this.

From Morabel to Cajamel.

From Morabel to Cajamel. The Course is South by West four Leagues, *Cajamel* is a River, and lies somewhat out like a Point as you come from the Northward, which Point is full of Cocoa-Nut Trees, between these places you have all along good Ground close to the Shore.

From Cajamel to Negombo.

The Course is S. by W. two Leagues, the Land is somewhat rounding in a Bight; coming from the Northward, when you are up with *Cajamel*, you must keep a little more off Shore, for there lies between that and *Negombo* a Ledge of Rocks, so that it is best to keep in seven or eight Fathom two Leagues Offing, until you have brought *Negombo* SE. by S. from you at least, for off *Negombo* in six Fathom, there lies a Rock NNW. from the *Flag-staff*, which stands on the North-end of the Fort. Upon which Rock there is but ten Feet Water, and it is but half the Bigness of a Ship, but it is very sharp, so that those who would go into *Negombo*, coming from the Northward, or out of Sea, must bring the Fort SE. from them, before they venture to stand into six Fathom Water; but they who come from the Southward, may keep along the South side as close to the Shore as they please, until the Fort is SE. from them, and standing right over the Spit, they will find no less than 20 Feet Water; but if they bring the Fort SE. by S. they will find twenty-four Feet, but then must be sure by all means not to go any farther North, for if they do, they will not find it good. *Negombo* may be known by a great Island, which lies on the South-side of the River; on the North-point whereof stands a thick Cocoa-Nut Garden, and from the said Point lies out a Ledge of Rocks.

From Negombo to Colombo.

From Negombo to Colombo. The Course is S. by W. eight Leagues and a half, between them you have all along good Ground. Only before the River of *Mactack* alias *Mantail*, where there lies off a Spit of foul Ground two Miles into the Sea even to ten or twelve Fathom; it is however but narrow; before *Colombo* you must Anchor in six or six Fath. and a half, the *Flag-staff* South from you, but you must not venture too near the Rivulet or Brook, for there it is all foul Ground.

From Colombo to Galketyn, or Gallitir.

From Colombo to Galketyn. The Course is South four Leagues and a half, Ships usually keep about four Miles Offing in thirteen and fourteen Fath. Here is good sandy Ground. *Galketyn* is a small round Bay, open to the Sea, so that in your bad Monsoon, there is but indifferent Riding.

From Galketyn to Pantura.

From Galketyn to Pantura. The Course is South four Leagues and a half; you have between them good sandy Ground, if you keep in above 18 Fathom, but if you come within ten Fathom, you

will find rocky Ground. *Pantura* is a River, and may be known by two Rocks on the North-side of it, lying about two Cannon shot off from the Shore, high above Water. You must Anchor a little to the Southward of the Rocks, in 10 or 12 Fathom, about two Miles from the Shore.

From Pantura to Culture.

The Course is South by East four Leagues; on the North-side of *Culture* lies a Ledge of Rocks. The Fort stands on the South-side of the River upon a small Hommock; if you must Anchor there, take notice of two small Hommocks which lie Land-warding near one another, of which the Northernmost is the flattest, and bring the Fort in the Middle between these two Hommocks, and steer then right with the Fort until you come into 4 and 5 Fathom as you think best; but have a special Care not to bring the Fort to the Southward of the Hommocks; for then in that depth you have very foul Ground.

Note also, That when the Fort is between them both as aforesaid, from within 15 to 5 or 6 Fath. the Ground is foul, but in 5 or 6 Fathom it is indifferent.

From Culture to the Island Barberein.

The Course is South by East four Miles; you may fail along the Shore in 7 or 8 Fathom.

Note, To the Southward of *Culture*, there lies a Rock under Water, upon which is but 12 or 13 Feet; it lies from the Fort SW. by S. half W. the said Rock lies also from the Hommock or small Hill of *Mackvenien* NW. by W. half W. but you may fail thro' between the Shore and that Rock in four and four Fathom and a half, for it lies almost two Miles from the Shore, within a Cable's length of *Afts-side*; off it you have 5 or 6 Fathom between *Mackvenien* and *Barberien*, within 15 Fath. it is somewhat foul Ground, above 15 Fath. to 20, it is reasonable good, but above 20 Fathom you have again extraordinary foul Ground and Coral Rock; so that your Lead will scarce bring up a Grain of Sand. *Barberien* is to be known by its being an Island, which lies about a Musquet-shot from the Main: To the Northward of the Island is good Anchorage in 6 or 7 Fathom Oazy Ground; also on the North-side of the said Island, is a little Bay, wherein small Sloops may ride, but they must in going in have a Care of the Point, for there lies off Rocks just under Water; in this small Bay you may Anchor in two and a half and three Fathom, good sandy Ground, about a Musquet-shot from the Shore.

From the Island Barberein to Cotcherie.

The Course is SSE. five Leagues one third; two large Miles to the Southward of the Island *Barberein*, is the River *Allikan* or *Bennetto*. On the South-side of this River is a small Fort upon a little Hill; in 12 or 13 Fathom, you have good Anchor Ground black Sand; also on the North-side of the River lies two Rocks plain above Water, four Leagues from the Shore you have between *Barberein* and *Cotcherie* 28 and 30 Fathom stiff Ground; but you may keep very near the Shore in seven or eight Fathom off of *Cotcherie*; four Leagues at Sea, is very deep Water no Soundings with an ordinary Line.

From the Point of Cotcherie to Amlamgode.

The Course is SE. by S. two Leagues off *Amlamgode*, the Ground is rocky; come no nearer the Shore with a Ship than ten or fifteen Fathom at the nearest. *Amlamgode* is a small River where no Boats can enter; on the South-side thereof, lies a little small Hommock which to Seaward is red and steep; about a Musquet-shot from the River, on the North-side close to the edge of *Strand* or Sea-side stands a Garden of Cocoa-Nut Trees, by which it may be known.

From Amlamgode to Regamme.

The Course is South East ten Miles; four Miles to the Southward of *Amlamgode* lies a Rock about two Miles off the Shore, upon which you may always see the Sea break, you seldom come nearer the Shore hereabouts than in 20 Fathom or a-breast of *Hekkedo*, for in 15 Fath. they meet with sudden shoalings, uneven, rocky and sandy Ground, although when they come into 8 or 9 Fathom,

and between that and 7 Fathom you will again meet with sandy Ground, but it is not over clean; so that they who have any Business hereabouts along the Shore, had best come no nearer than 20 Fathom. *Regamme* is a jetting out point whereon grows great Thickets of Cocoa-Nut Trees, and close under the Shore there lie great Rocks, high above Water, whereby it may be known.

From *Regamme* to *Point De Galle*.

From *Regamme* to *Point De Galle*.
The Course is South East by East 4 Leagues; keep along Shore between 20 and 25 Fathom, but no nearer, especially if nearest to *Regamme*, for 4 small Miles or a large League to the Southward of *Regamme*, lies a sunken Rock, which hath but 12 or 14 Feet Water on it, and close aboard of it, you have all round 15 and 16 Fathom.

Take Notice on the Shore of a small red Clift, where the Path-way of the Strand goes along; right off that red Clift, lies the Rock of *Jendore*, and to the Southward of *Grandere* lie two more sunken Rocks off Shore; within a Cable's length of which on the off-side, you have 14 and 15 Fathom, but they give you Notice enough whereabouts they lie, for the Sea breaks continually on them, they being not above 5 or 6 Feet under Water. They who sail in small Sloops between the Rocks and the Main, find 9 and 10 Fathom Water; but keep nearest the Rocks although you find very uneven Soundings, one cast of the Lead, it may be 2 or 3 Fathom more than another, but is never less than 4 and a half or 5 Fathom.

Right off a to the Bay of Galle the Hay-cocks bears NNE. half E. and the Peak N. by E. Easterly.
P. de Galle, is a Bay wherein the *Dutch* having a strong Garrison, will admit no Strangers to enter without one of their own Pilots resident upon the Place to bring them in, so that I have no Occasion to write much concerning this Place. I give the unacquainted Notice, That he must not adventure further than 16 or 18 Fathom; the Flag-staff bearing NNE. from him, for there he may be sure of good Anchor Ground; right before the Bay lie two sunken Rocks, one in 15 the other in 17 Feet Water, and round about them is 10 and 11 Fathom, if you come not into less than 15 Fathom there is no fear of foul Ground. On the East-side of the Bay lies a Rock in the Sea, which may plainly be seen to break, which is called *Bicas Falch Canglie*.

From *Point de Galle* to the *Red-Bay*.

From *P. de Galle* to the *Red-Bay*.
The Course is East by South 20 Miles; about 4 Miles to the Westward of this Bay, lies an Island under the Main, which is covered with Cocoa-Nut Trees, and therefore called *Bobemias* Island, or *Woody* Island.

If you have occasion to go into the *Red-Bay*, and come from the Westward, keep along the Shore in twelve or fourteen Fathom, until such time as you have past the red steep Point. Then you shall see a Reef lying along the Shore, sail along by the said Reef in the aforesaid Depth, until you see a small Island close under the Shore on the West-side of the Bay; at that time you will also see a Rock lying above Water in the inside of the Point of the said Reef; you must continue to sail so far to the Eastward, as to bring that Rock and the aforesaid small Island in one, and when the Rock and the small Island (in one) bear N N W. from you, then luff up North, or North by West, and so you may sail within a Stones cast of the said Rock; when you are come within a Cable's length within the said Rock, you must let fall your Anchor in four and a half, and five Fathom, for if you should run above 2 Cable's length within the said Rock you will find foul Ground; but you must take good Notice, and mind that as you have brought that Rock upon the small Island by sailing to the Reef, so you must not offer to luff up before you have brought them N N W. from you, because at the End of the Reef there lies a sunken Rock, upon which is but ten or eleven Feet Water, so that you must have a Care of being too hasty, for fear of running upon it.

On the East-side of the Bay is high Land, and a small Village called *Mietre*, but there is no Sailing out or in by the high Land, by reason of a Ledge of Rocks which stretches almost three fourths of the Bay over, so that whoever should attempt to stand out of the Bay to the Eastward, would find themselves deceived, for they cannot Sail out otherwise than S. by E. or rather something more Southerly, until they come into 12 or 14 Fathom, then they may proceed as they please, minding their Lead and looking out.

From the *Red-Bay* to *Mature*.

The Course is as before, a little more Southerly, distant ten Miles. *Mature* is a River, in the Mouth of which lie two or three Rocks, and about a Cannon-shot to the Eastward of it lies a small Island close under the Main, like *Woody Island*, whereby it is easy to be known; without, thwart the River, stretches from the Westward a Reef or Ledge of Rocks about two Miles from the Shore. So that they who have occasion to pass by, or come to an Anchor before *Mature*, must come no nearer than 12 Fathom, until such time as the Island bears North by East, and North North East from you, and then you may (if designed to anchor) stand towards the Island as nigh as you will, with small Vessels. Men may Anchor within the said Reef or Ledge before the River in four and a half Fathom good Ground; but to go without it, they must as aforesaid, first sail close up to the Island, and then luff in until they are past the Reef, and afterwards stand towards the River as nigh as they think convenient.

From the *Red-Bay* to *Mature* off of *Mature* four Leagues, the Hommock bears N. NW. the Peak NW Northerly

From *Mature River* to *Point Dondra*.

The Course is SE. 4 long Miles; from the West-side of *Dondra*, lies a ledge of Rocks, which stretches SW. a large Mile, upon which is but 9, 10, and 12 Feet, and it is steep too on both sides, there being to Seaward of it 6 and 8 Fathom, and on the inside 3 and 4 Fathom, of which you ought to take great Care when you come hereabout.

From *Mature River* to *Point Dondra*.

From *Mature* to *Dondra*, in twelve Fath. Water.

If when a-breast, you find about 12 Fathom Water, then E. and by S. half South, 4 small Miles will carry you clear off the Point *Dondra*, two Miles from the Shore, in 15, 16, and 18 Fathom. The Point of *Dondra* is low Land, whereon grows a great Thicket of Cocoa-Nut Trees, by which it is easily known.

From *Mature River* in twelve fath. depth to *Point Dondra*, Lat. 5 deg 50 min.

From *Point Dondra* to *Point Gaelies*.

The Course is East half South. The Point *Gaelies* is a steep Point, so that they who would sail into *Gaelies* must keep the Point Aboard as near as possible they can within half a Musquet-shot from the Shore, otherwise they shall hardly be able to fetch into the Road and to ride, without venturing the loss of their Anchors, therefore let them luff about the Point as close as they can, for there is no Danger, but what shows itself. The *Gaelies* is a small Bay that rounds into the Westward, and there Ships ride secure for Northerly, Westerly and Southerly Winds, if they lie in five and a half or four Fathom Oazy, there comes in sometimes a tumbling Sea.

From *P. Dondra* to *Point Gaelies*.

From *Gaelies* to *Bamberande*.

The Course is East North East four large Miles, but is no good Road for Ships to come into, they lie a good distant from the Shore. Before this small Bay there is but one small spot of clean Ground, which is hardly a Cable's length in Circumference.

From *Gaelies* to *Bamberande*.

From *Bamberande* to *Dyckwell*.

The Course is as aforesaid, distant 4 Miles; between them lies a Ledge of Rocks, above 2 Miles off Shore, which sometimes may be seen to break; therefore when you sail hereabouts, you must take care not to come nearer the Shore than 15 Fathom. *Dyckwell* is to be known by a Cocoa Nut Garden, which seems to be 2 Miles long; there lieth also in with the Shore a Reef which stretcheth along the Shore about a Musquet-shot from it.

From *Bamberande* to *Dyckwell*.

From *Dyckwell* to *Nielwell*.

The Course is as aforesaid East North East distant 2 Leagues; here Ships sail along the Shore in 12 and 14 Fathom, about a Cannon-shot from the Land. *Nielwell* is as great and as wide as the Bay of *Bellegam*, where on the West-side Ships may be shelter'd from SSW. and Westerly Winds; on the West side, on the Point, is a small Hommock, which, as Ships come from the Westward, makes like a small Island, whereon grows a great many Cocoa-Nut Trees; close on Board of which, Ships must luff in as near as when they luff into *Gaelies*, (tho' not

From *Dyckwell* to *Nielwell*.

for fear of their Anchor) within fourteen and twelve Fath. and yet, without fifteen from *Gaelies* hither, it is all along very foul Ground; on the East Point is a Rock above Water. Within the Bay there is no Danger only three Flats, which lie near to the Land.

From Nielwell to Coenacker, or Kerketoos Bay.

From Nielwell to Coenacker. The Course is East North East half East, distant four Miles; this is a great Bay, you must keep as aforesaid along Shore in 12 and 14 Fathom; right in the middle, in the Mouth of the Bay, lies a great Rock above Water; on the West-side is a steep Point like the Point of *Gaelies*, which must be kept close aboard at your going in.

From Coenacker to Tangale.

From Coenacker to Tangale. The Course is E N E. half E. distant two Leagues. This is a Point off which is a small Bay, Ships keep along Shore in twelve and fourteen Fathom.

From Tangale to Waelwe.

The Course is East North East half East four Leagues; here you have along the Sea-side a low sandy Beach and low Land, but the Land in the Country is indifferent high and steep; keep along Shore in four large Miles Offing; in 20 and 22 Fathom you have sandy Ground mixt with Coral. *Waelwe* is a great River, on the North-side whereof is a small Hill, right open of the River; about 4 small Miles from the Shore lies a Rock, upon which the Sea commonly breaks. You may with ordinary Ships sail through between the Rock and the Main, there being 7 or 8 Fathom sandy Ground.

From the Red Bay to Mature.

From Waelwe to Mago. The Course is ENE. Northerly. *Mago* is a Rocky Point, half way between them you begin to find foul Ground, but you must keep in 22 and 24 Fathom; to the Eastward of *Mago* lies a Rock above Water about eight Miles from the shore; between *Waelwe* and *Mago* lies the Salt-Ponds (or *Mazen-Sale*) which is a little Bay, wherein you may go with small Sloops or Boats, but no great Vessel, there lies in the Bay a Rock, but I have not sounded round it, and therefore can give no Description of it.

From Mago to the Elephant.

From Mago to the Elephant. The Course is North East sixteen Miles, South half East from the *Elephant*, lies the great *Abaixos* or *Baffias*, which are certain Rocks, upon which formerly as the Natives report, stood a Brals Chapple, and therefore by the Natives to this Day called *Crown Cote*.

The Marks to the great Abaixos. Latitude 6 deg. 16 min. The *Abaixos* or *Baffias*, are near a Cannon-shot in Length, and about the same in Breadth, upon which the Sea breaks very high, and some Rocks show themselves above Water; you must keep on the off side of them in twenty, twenty-five, and thirty Fathom, and no nearer; they lie about three Leagues on the off side, or near four Leagues from the Shore: Between the *Abaixos* and the Main, but nearest the Main, you may sail through in 8, 9, 10, 11 and 12 Fathom, but on both sides you must mind your Depths, not to come to the Shoreward in shallower Water than 8 Fathom, nor to the Shoalward in deeper than 12, until such time as you have passed it and brought it to bear S. and by E. and SSE. from you, and *Elephant-Hill* N. by W. and NNW then steer away ENE. if you are in the mid-Channel; if nearest to the Main, E. by N. until you come into 20 Fathom, and then steer NE which will carry you without the small *Abaixos* or *Baffias*; but plain enough in sight of the Breaks within the *Abaixos*, the Ground is hard Sand; but near the *Abaixos* stony rocky Ground; the *Elephant* is a Hill or great Rock, which standeth by it self, upon the Strand, close by the Sea-side up in the Country you have Hemmocky Land.

To go from Point Dondra without the great Abaixos. Note, From Point *Dondra*, to go clear without the great *Abaixos* or *Baffias*, the Course is ESE. 20 Leagues; but there ought respect to be had to the Current, as you find it hall you towards the Shore, or let you off, which you will easily discover by your Eye and Lead, and must act accordingly.

From the Elephant to the High Sand Point, or Julius.

From the Elephant to High Sand Point. The Course is North East by East sixteen Miles; between them lie two Reef, one in with the Shore, and the other two Miles in the Sea, off the Point, upon which is

but one and a half Fathom Water; you may Anchor behind the high Sand Point, where is a Bay in which is good Anchor-Ground.

Note, ESE. from the Sand Point lies the small *Abaixos* or *Baffias*, about eight Miles from the Shore; you may fail within them in about five Fathom Water nearest the Shore in six and seven Fathom, but no deeper; nearest the Shore is safest in respect of Danger, but five Fathom and a half is the mid-Channel.

From the great Abaixos or Baffias, to the small Abaixos.

The Course is North East half North; on the off-side of the little *Abaixos* or *Baffias*, you must keep in eighteen, fourteen, or sixteen Fathom, and come no nearer, for then you will find stony Ground; between the great and small *Abaixos* or *Baffias*, you will have 40, 30, and it may be 25 Fathom.

From the high Sand Point to the low Sand Point.

The Course is North East by North sixteen Leagues; off the low Sand Point lies a Flat or Sand about four Miles into the Sea, so that they who come from the Southwards, within the small *Abaixos* or *Baffias*, must take a special Care to edge off when they come thereabouts, between the two Sand Points; after you have past the small *Abaixos* there is good Anchorage, in ten and twelve Fathom Sand; the small *Abaixos* are about three Miles in Length.

From the low Sand Point to Aganis.

The Course is NNE. sixteen Miles. *Aganis* may be known by a small Peak, which is near it, and makes like a Tower; to the Northward of the said Peak, lie two small round Hommocks near each other; close to the Strand is a Thicket of Cocoa-Nut Trees, by which *Aganis* is very easy to be known: From the lower Sand Point thither, you must keep in about four Miles Offing, in twenty and twenty two Fathom sandy Ground, mixed with Coral; there is fifteen and sixteen Fathom within Gun-shot of the Shore, and the Land is steep.

From Aganis to Arregamme, or Arrewegamme.

The Course is N by E. 10 or 12 Miles; off *Arregamme* lies a Reef about two Miles in the Sea. *Arregamme* may be known by two small round Hills, which lie somewhat up in the Country, at a small distance one from the other, and a Thicket of Cocoa-Nut Trees, but not so great as that of *Aganis*; you must keep in the same Depth and Offing from the Shore as before.

From Arregamme to Poawegamme (or Tricule.)

The Course is North by East, 14 Miles. *Poawegamme* may be known by a Grove of Cocoa-Nut Trees, wherein stands, and visible to be seen, *Shinglefs Pagod*; the Land to Seaward is low, but in the Country high and Mountainous; about a Mile from the Shore lies a Reef; you must hereabouts keep the aforementioned Offing in 20 and 22 Fathom; the Ground is foul.

From Poawegamme to Metecalpe.

The Course is North, distant 16 Miles; here the Land to Seaward is low and smooth, there also stands a long Grove of Cocoa-Nut Trees, by which it may easily be known, for there is not such another upon all the Coast; you must sail along Shore, as aforesaid, in 20 and 22 Fathom, 4 Miles Offing.

From Metecalpe to Bottacalao.

The Course is North by West, 8 Leagues; between them is good Anchor-ground, in 10 and 12 Fathom, about 2 Miles Offing from the Shore.

Note, That to the Southward of the River *Battacalao* lies a Ledge of Rocks, or stony Reef, two Leagues off the Shore, which is very uneven and foul; with a small Vessel you may go between the Reef and the Main, but it is safer to go without; and they who come hereabouts in great Ships, to prevent running upon the Ledge or Reef, must take Care to keep at least eight Miles Offing from the Main. *Battacalao* is to be known by a high Hill up in the Country to the southward, which by Seamen is called the *Priers Hood*; when the *Hood* beareth South West by West.

West from you, then you have the Reef on your broad-side; and if you would stand in to the Road towards the River, Anchor in seven and eight Fathom a Mile from the Shore. On the South-side of the River stands a parcel of Cocoa-Nut Trees, but very thin and stragling, by which it may easily be known.

From Battacalao to Vendeloos, or Appulamen.

The Course is North West and by North 28 Miles. *Vendeloos* is a Bay lying on the N. side of a Point, and may be known by a small round Hommock that stands a little way up in the Country; to the Southward of that Hommock lies three or four small Hills, but they lie further up in the Country; here you have along Shore eight or nine Fathom, within Gun-shot of the Land, but the Ground in many places foul; they that are bound to Point de *Perra*, must keep the Shore aboard, for if once thereabouts they leave the Shore, they will hardly be able to fetch it again; but will be forced at once to stand over for the Coast, and so endeavour to gain their Voyage.

From Vendeloos to the Island Provedien.

The Course is NW. and by N. ten or eleven Miles; the Land between these two Places lies somewhat rounding in a Bight, the Ground all along foul, which makes it bad Anchoring here; come no nearer the Shore than 16 or 18 Fathom, at about 8 Miles distance the Island makes like the Sail of a *Sampan*, for it is a white Rock which lies close under the Main, so that it may easily be known; four Leagues to the Northward of this Island the Ground continues foul.

From Provedien to the Point of Coetier.

The Course is NW. and by N. about 20 Miles. The Point of *Coetier* is a low Point and level; about eight Miles to the Southward of it is good Anchoring two Miles off Shore in 10 and 12 Fathom, and from the Point to almost half over the Bay is good Anchor Ground in 20, 22, and 24 Fathom, but forwards to *Trinkamaly*, or *Crankanella*, it is very deep and inconvenient to Anchor.

From Coetier to Trinkamaly, or Crankanella.

The Course is North West 8 Miles. *Crankanella* is the further side of the Bay; it is a great Bay, at least six Miles in or more; the North side of *Trinkamaly*, is high Land; and there are the best Havens; between the High Lands, Ships lie Landlock'd from all Winds, and going in there is no Danger but what you can see, but it is all over very deep; on the N. side there are two Rivers, but they are in the Coe of the Bay; on the South-side are three Rivers, in which, you may run in with a pretty large Ship, without either Anchor or Cable.

From Trinkamaly or Crankanella, to the Island Pombedi.

The Course is North West, four Miles, and it is all along very deep, no Anchoring.

From the Island Pombedi to Basseras Road or River de Crofs.

The Course is North West; hereabouts four Miles off the Shore, you have deep Water.

From Rio de Crofs, or Basseras, to Rio de Sorto, or Carty.

The Course is North West 12 Miles; you have good Ground four Miles from Shore, 16, 18, and 20 Fath. Oazy all along; hereabouts the Land is level.

From Rio de Sorto to Moelwale, or Passake.

The Course is North West 16 Miles; here you have deep Water and good Anchor Ground; off *Moelwale* there lies along Shore, a shoal which runs ten Miles into the Sea, so that they that sail here with a great Ship, must come no nearer than six or seven Fathom; as you come from the Southward, if you keep no farther off shore, than about 8 Miles, you will most certainly run upon the shoal; therefore be sure to keep about four League Offing, and that will carry you clear without it in

eight or nine Fathom Coral Ground, and when you are almost past the Reef, you will find sandy Ground mixt with Shingle and Shells, and may be, sometimes small Coral Stone among it; if you keep 14 or 15 Miles off Shore, then you will go round it in 12 and 14 Fathom Sand, with small shingle among it; and if you are bound for Point de *Pedra*, then luff immediately up close aboard the Reef, to get under the Shore; you need not fear any thing, tho' you find but 5 or 6 Fathom; if it be sandy Ground, you may be sure you are not yet past the Reef, you must keep within half a Gun-shot of the shore, there you have 7, 8, or 9 Fathom Oazy, but then must edge farther from the Shore than a Cannon-shot, for otherwise by Point de *Pedra* you will come to Damage.

From Moelwale to Point de Pedra.

The Course is NW. and by N. 14 Leagues, and between them you have good Anchor Ground, 7, 8, and 9 Fathom after you are past the aforesaid shoal; but you must keep close under the Shore, about half a Cannon-shot Offing in the aforesaid Depth, but no farther than a Cannon-shot, that so you may keep clear of a sunken Rock, upon which is but nine Feet Water at the shoalest part of it, and must be left to Sea-board, for it lies ten Miles out into the Sea, and is surrounded by a great Flat or Shoal of Sand, which is dangerous; it may be borrow'd on by the Lead, but by no means no nearer than 3 and a half Fathom.

The said Rock, or Shoal, lies from the Pitch of the Point de *Pedra*, E. and E. by N. but if you are coming from the Southward, and cannot be able, by reason of the Westerly Winds, to fetch or get the Shore close on board, you must, in such a case, keep about 12 or 14 Miles Offing, in 9, 8 or 7 Fathom and no nearer, until Point de *Pedra* bears W. half S. or rather W. by S. upon the aforesaid depth, and then you must haul up as far W. as you can, but not to the Southward of the W. until such time as the Point shall bear SW. a little Southerly; for if you do, you will meet with very uneven sounding on them; it may be a fathom deeper, the next, perhaps, 2 Fathom shoaler; and then you shall have no less than 3 and half or 4 Fath. if you have not steered to the Southward of the West more than to the above-prescribed Limitation; if notwithstanding these Directions, thro' a misunderstanding of them in 4 Fath. depth, you should find Sand mixt with stones, keep then immediately off until you get Sand, shingle, and shells mixt in 5, 5 and a half, and 6 Fath.

When you are within Point de *Pedra*, the Pitch of the Point bearing S. and S. and by E. from you, about 14 Miles off Shore, coming into 4 Fath. and a half, you will have fine Sand, and even Ground, where you may Anchor, if the Wind will not suffer you to get under the shore; if it bears S. or S. and by E. from you, you must turn it up to get under the Land, stand no farther to Seaward, than to bring the Pitch or the Point SW. from you, and as you stand in again to the Shorewards, no nearer the Land than to bring the said Pitch of Point de *Pedra* SSW. to prevent Danger. The N. side of Point de *Pedra* is to be known by a Church and some Houses which stand upon the Point, and the Land stretches away to the Westward.

From Point de Pedra to the North West Point of Larnedien, called Hamon-Hiel Fort.

The Course is W. and by S. and WSW. eight Leagues; when you are about 20 Miles from Point de *Pedra*, you will see the NE. Point of *Larnedien*, from which you must edge away at least ten Miles from the Shore, for there lies a Flat, upon which there is but three Fathom; so that you must stand over for the North West Point until you can plainly see the Fort *Hamon-Hiel*; bring that SE. by E. from you then will *Ilbo de Sorto* bear S. by W. and SSW. from you; steer with that until you come into 4 and 4 and a half Fathom good Anchor Ground, and the Fort *Hamon-Hiel* E. and by S. from you. In the Months of May, June, and July, you have here frequent SSW. Winds, which blow very hard, and yet notwithstanding there goes such strong Tides of Ebb and Flood, that you even then run it up, or edge it up rather.

From Hamon-Hiel to the inside of the Island to Jaffnepatenam or Jetrapatam.

The Course is East 24 Miles; between them runs a small winding Gut or Water, but the most part of the Way is flat, and almost dry, about 4 Feet Water on Neap-Tides, so that there is Passage only for great Boats; but in the Offing is Water enough.

Directions to keep clear off of the Shoal Moelwale.

From Moelwale to Point de Pedra.

A Description of the danger of Point de Pedra.

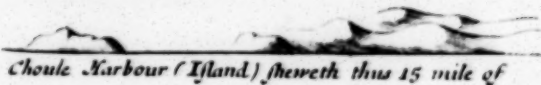
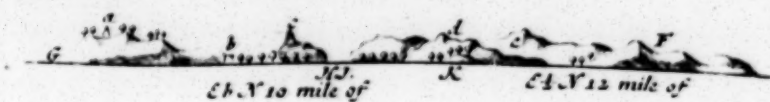
Directions to keep clear of it.

From P. de Pedra to Hamon-Hiel.

Map Room Cat

22

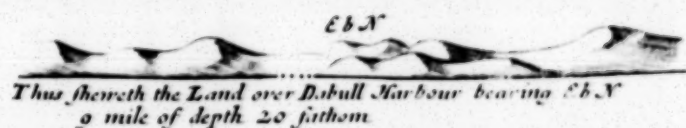
Thus sheweth the Land over and to S^{ward} of Bombay at the Bearings and Distance depth 12 fathom a is Moodeys Tomb. b. is Mallabar Point. C. is ahants. d. is the N^W end of Caronjay. e. is Savage Castle. F. is the S^W end of Caronjay. G. H. is the Length of Bombay. K. is Old Womans Island. M. J. is the opening between Bombay and Old Womans Island.



Thus sheweth the South Point of Carwar Bay

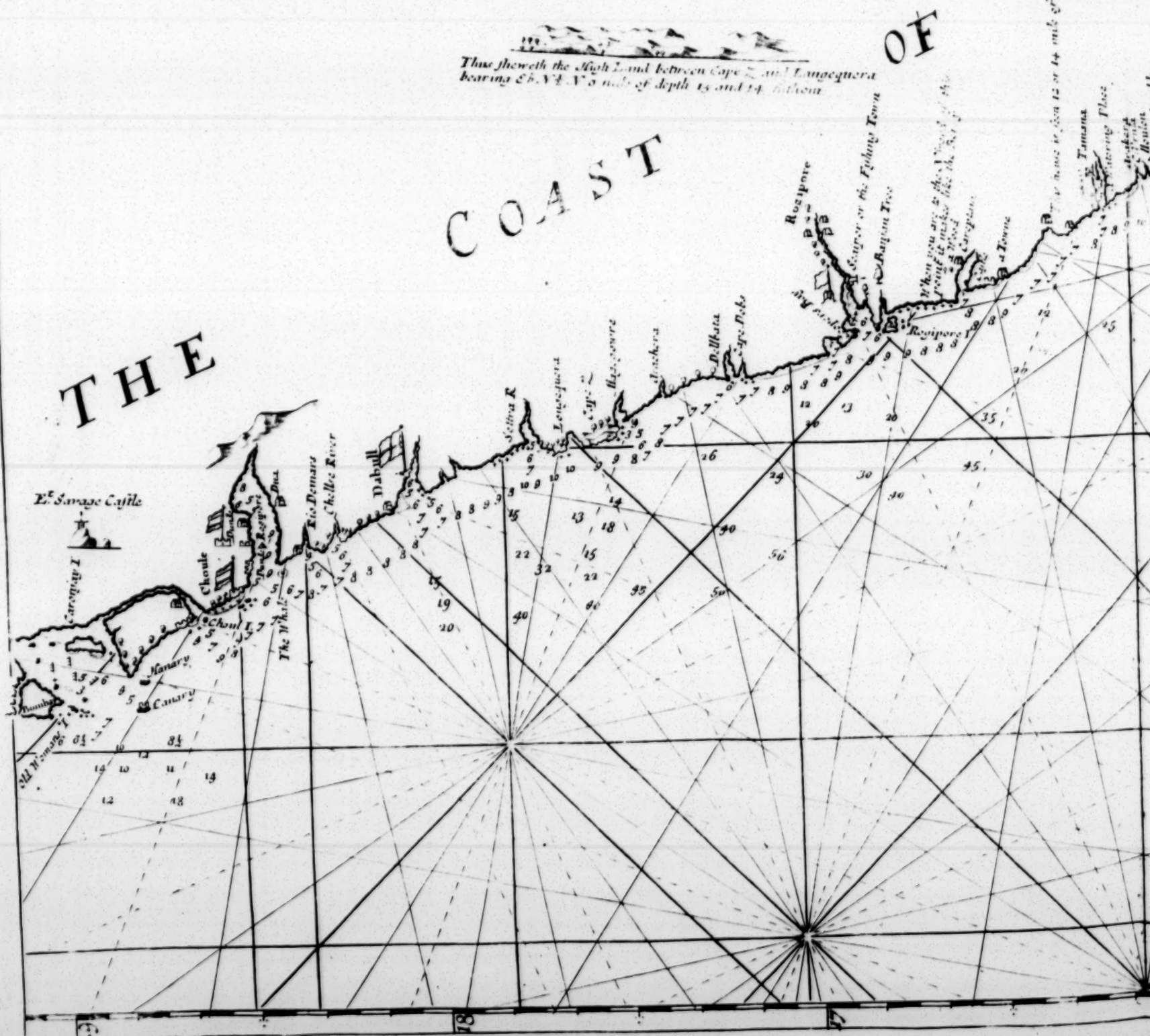
Thus sheweth the Land over from the Islands

Thus sheweth in the forme



Thus sheweth the high Land between Cape Z. and Longuequa bearing E b N 10 mile of depth 15 and 14 fathom

Thus sheweth the high Land E b S 12 mile of depth



Land over Carwar Bay at these bearings being 7 mile Distance
the Islands in depth 19 fathom

Thus sheweth the Land from Carwar Bay to the Sward of India Diva
in the former Station and depth. a. is India Diva

Thus sheweth the Rocks before Carwar Bay with high Land
over them at these bearings when you
are in the offing

Thus sheweth the high Land over Carwar Bay
when you are in the Road

Thus sheweth the high Land over Goa

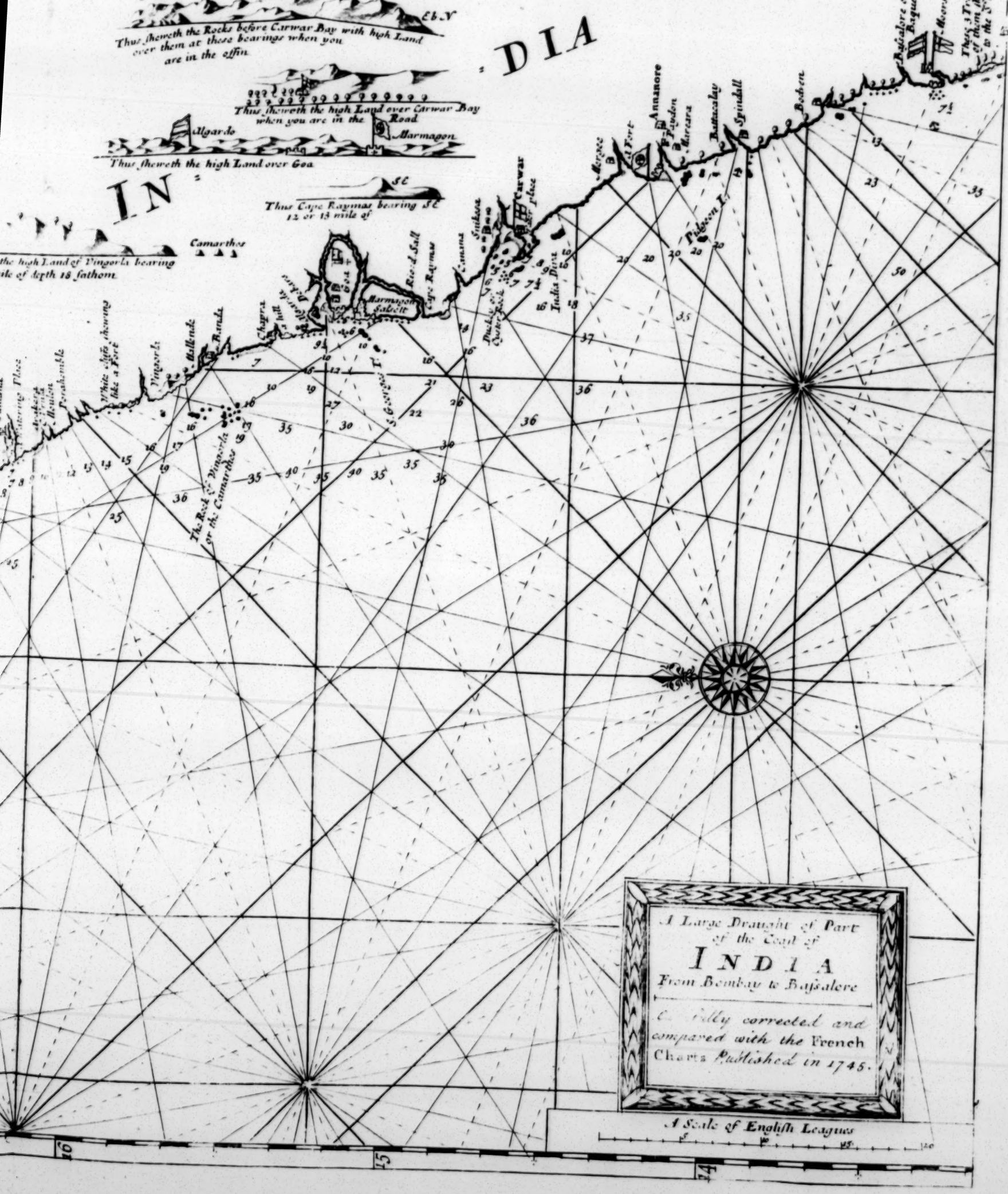
the high Land of Vingorla bearing
of depth 18 fathom

Thus sheweth Mallapay bearing ENE

Thus sheweth the Land when you ride in Baselore Road bearing NE E

In Baselore Road the Land sheweth thus Joyn A to A

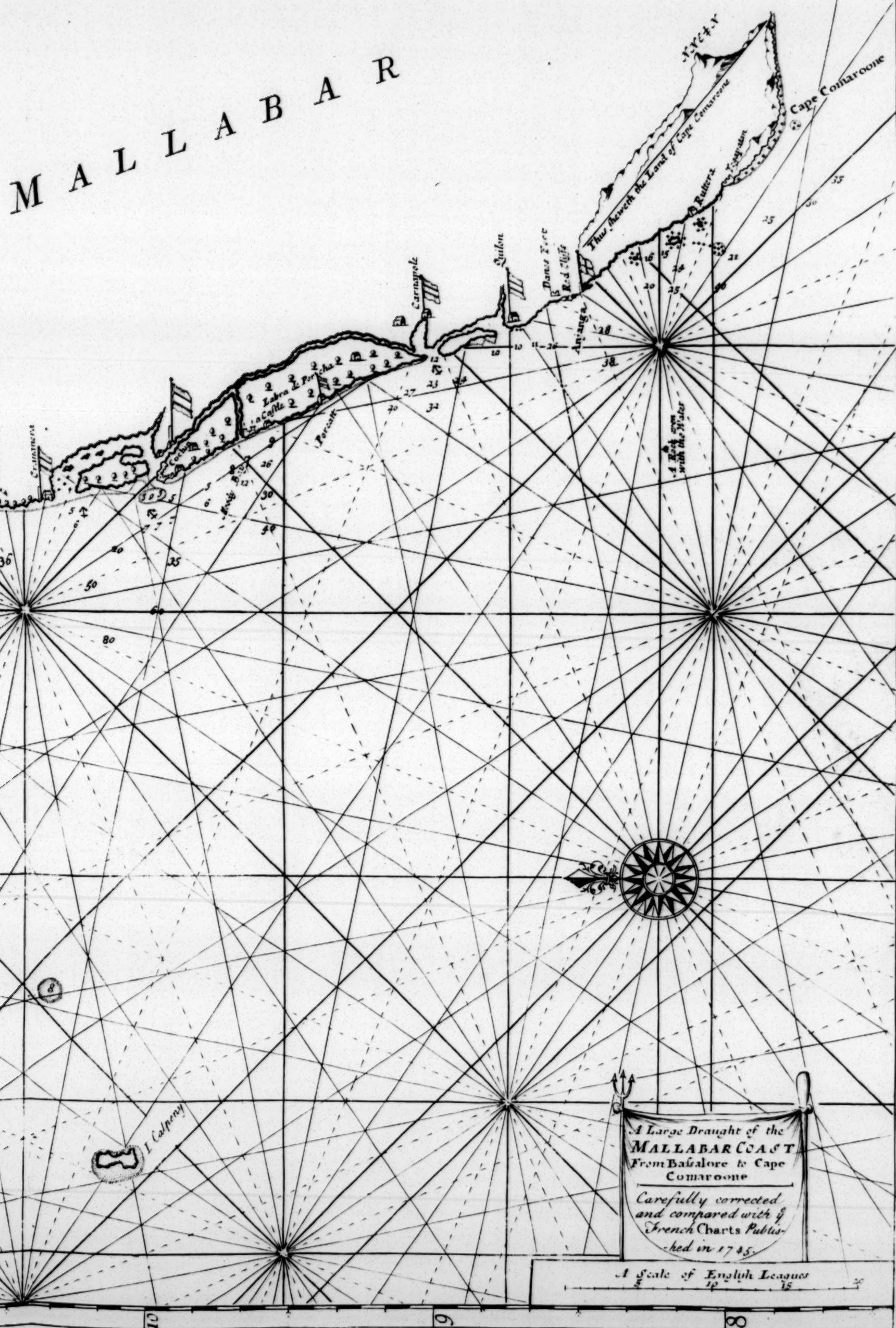
There is a Tree when you are to the Sward of India Diva
of them then like. From them they are 1/2 mile
to the Sward of Baselore Harbour

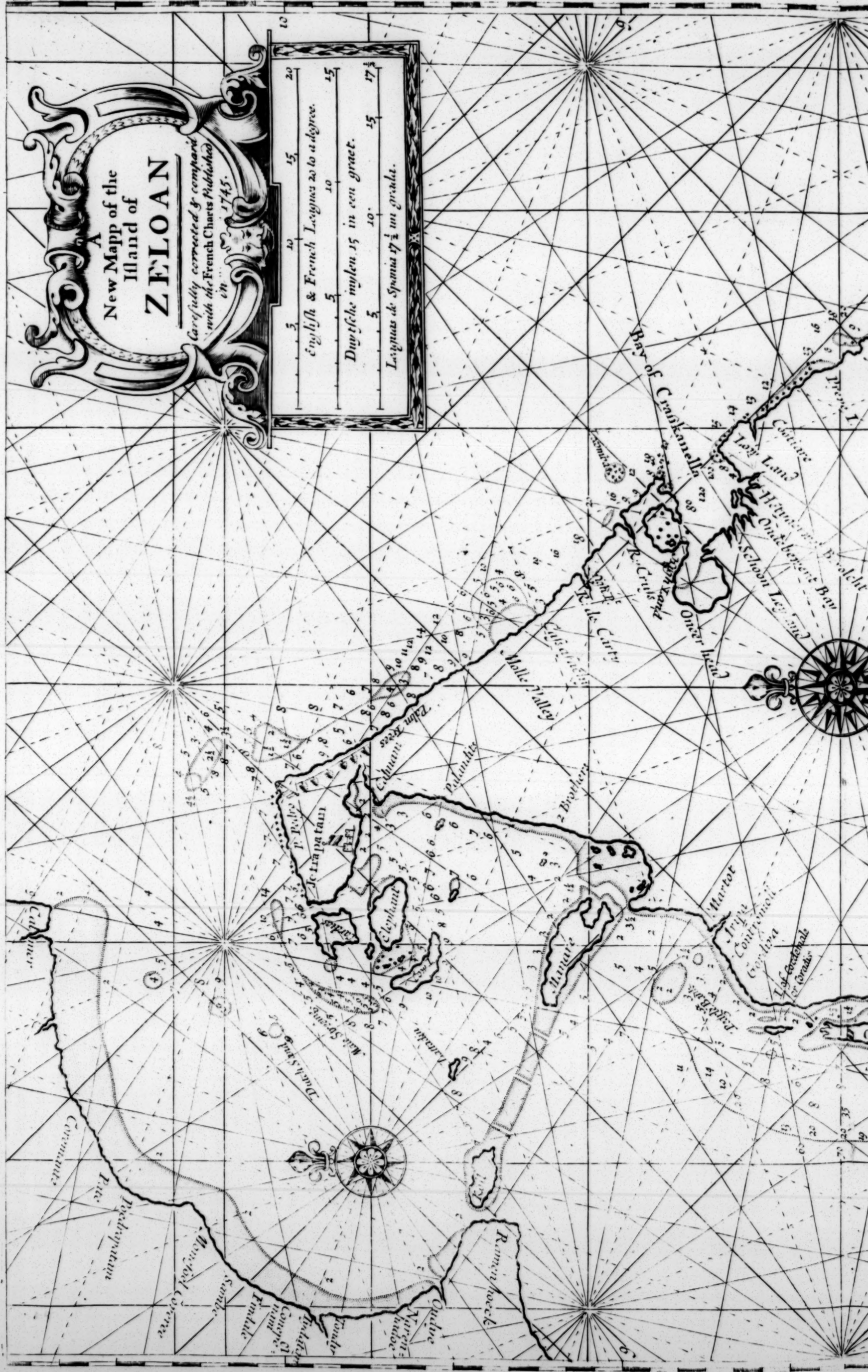


A Large Draught of Part
of the Coast of
INDIA
From Bombay to Basalere
C. Bally corrected and
compared with the French
Charts Published in 1748.

A Scale of English Leagues

MALLABAR

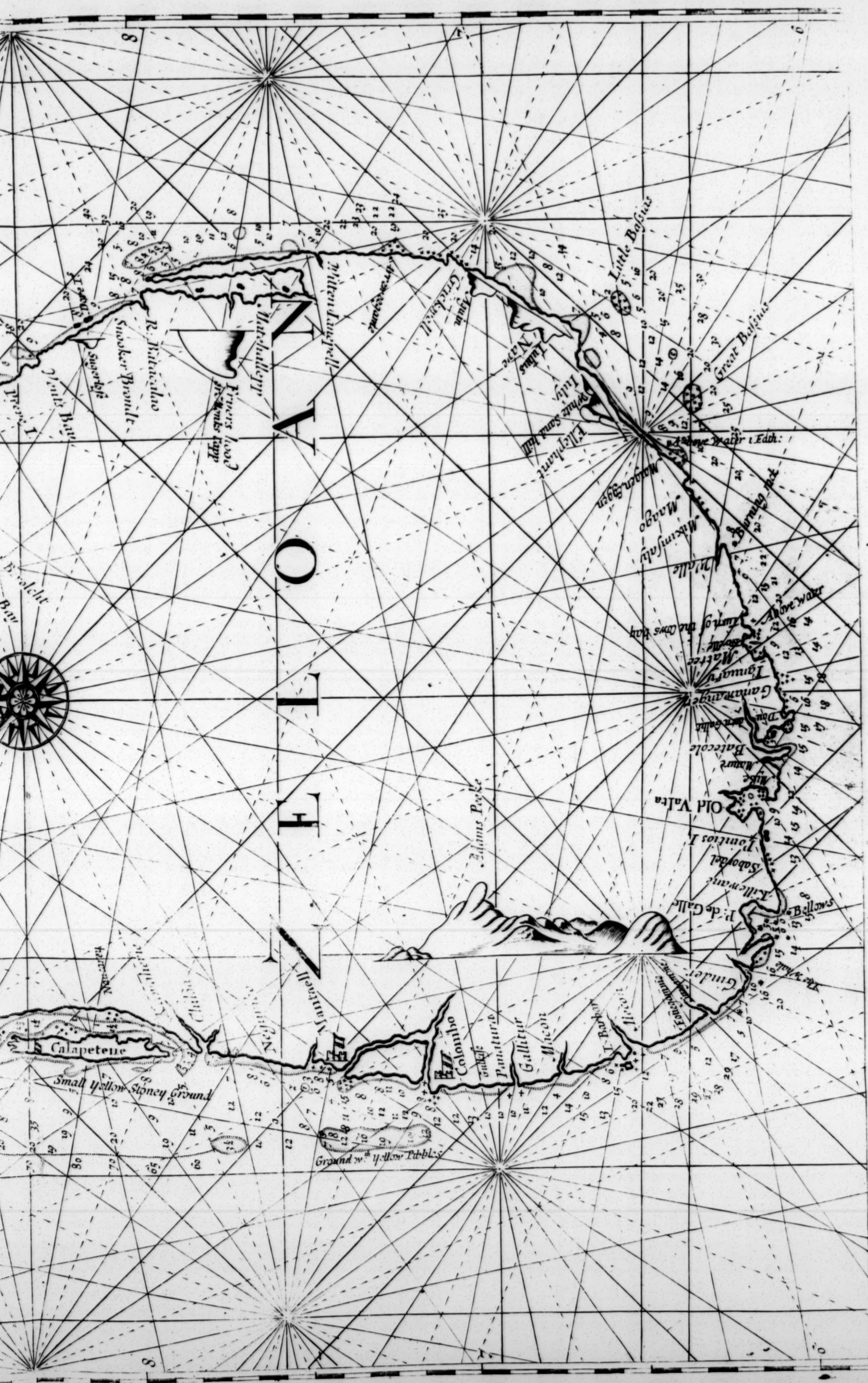




A
New Mapp of the
Island of
ZELOAN

Carefully corrected & compared
with the French Charts Published
in 1745.

5	10	15	20
English & French Leagues 20 to a degree.			
5	10	15	20
Duytsche mylen 15 in een graet.			
5	10	15	17 1/2
Leagues de Spina 17 1/2 in grade.			



From Jaffnepatenam, or Jetrapatam to Calmonlie-Point.

From Jaffnepatenam, to Calmonlie. The Course is East South East 10 Miles; it is all along very shoal there, between them, 10, 11 and 12 Foot; nearest the Point of Calmonlie lies a Rock, upon which is 3 Foot and a half Water; but you may sail close by it. Within a Ship's Length of Calmonlie, you may anchor in 3 Fathom sandy Ground 2 Miles from the Shore.

From the Point of Calmonlie, to Pallendien, or Isle de Gallo.

From Calmonlie to Pallendien. The Course is South West by South 10 Miles, in the fair way you have 5 or 6 Fathom, fine sandy Ground; 2 Miles from the Shore, off Ilbo de Gallo lies a Flat, which you must have a Care of; it lies a Cannon-shot from the Shore, and is a Coral-bank.

From Pallendien to the two Irmaos.

From Pallendien to the two Irmaos. The Course is S S W. 12 Miles, to which you must come no nearer than within 2 Miles, because there lies off a stony Reef, which stretches to the Westward.

From the two Irmaos to Manare.

From the Irmaos to Manare. The Course is South by West about 20 Miles in the fair way, nearest to the two Irmaos, 6, 5, and 4 Fathom; as you come near Manare, it is very shoal; when you come before Manare, you will see the Church, called formerly by the Portuguese, *Madre de Deus*, bring that Church West from you, and then steer with it as nigh as you think fit, according to the Water the Vessel draws; you have 10 and 12 Foot Water about a Cannon-shot from the Gut, or being about 4 Miles off Shore, but failing along the Island in 12 and 14 Foot Water, you must keep so long with the thick Tree, which stands upon the main Land, that you bring the aforesaid Mark to bear on the West Point of the River; WSW. is good Riding.

From the West end of Manare to Ramenekotte, known by the Point whereon stands Pagoda.

The Course is North West and by North 20 Miles. They who put over from Manare to Ramenekotte ought to steer from the River of Manare NW. and by W. which for 8 Miles will carry you into 6 and 6 and a half Oazy Ground. You may fail by the Island Ramenekotte all over in 7 Fathom Water; but if the Wind takes you short, you cannot so easily fetch the Shore: If you would fail behind the NE. End of Ramenekotte, you must be very careful to keep the Lead going as fast as you can; for as soon as ever you come into 5 Fathom it shoals as fast as you can heave the Lead, every Cast half a Fathom, and it is foul Ground, from thence you must steer for the Gut, or along the Shore in 7 Fathom, till you come before the Gut, which you must stand close to, and come to an Anchor nigh the Main.

From the North East Point of Ramenekotte to the Island Calidien.

From Ramenekotte to Calidien. The Course is East and by North, and West and by South 14 Miles.

From the Island Calidien to Manare River.

The Course is South South East 20 Miles, before which you may Anchor. From Calidien to Manare.

From the Island Ramenekotte, and from before the Gut of Ilho de Vacco.

The Course is ENE. 9 Leagues. Ilho de Vacco is about 8 Miles long, in the fair way you have about 6 or 7 Fathom, at the West-end lies a small Reef, which you must have a Care of. From Ramenekotte to Ilho de Vacco.

From the East End of Ilho de Vacco, to Ilho de Pagoda.

The Course is West South West 10 Miles, in the fair way 7 Fathom. From Ilho de Vacco to Ilho de Pagoda.

From Ilho de Pagoda to Commedien.

The Course is SE. and by S. 12 Miles, on the East-side lies a small Reef, behind which you may Anchor in 4 and 3 Fathom good sandy Ground, in the fair way 6 and 7 Fathom. From Ilho de Pagoda to Commedien.

From the Island Commedien to Manare.

The Course is a little Easterly, in the fair way is 6 and 7 Fathom; you may anchor before Manare River, according to the above-mentioned Directions. From Commedien to Manare.

From Commedien to Pallendien, or Ilho de Gallo.

The Course is East and by North 12 Miles, in the fair way 6 and 7 Fathom. From Commedien to Pallendien.

Note, That from the Point of Calmonye to Manare, between the Islands and the Main, there is no Passage for any great Boats, for it is very flat; but yet there is a small Gut, or Water-Course, through which the Natives pass with Toney's Boats, and such like Country Boats, but it hath not been pass'd by any Europeans.

From Hammon-Hiel to Jaffnapatenam.

If you would fail to Jaffnapatenam or Jetrapatenam without the Island, first stand over from Ilbo de Sorto without Ilbo de Danimaflare along Shore in 5, 6, and 7 fath. then along Ilbo de Pagoda to the end of it, then from thence steer E. and by S. and ESE. along the Island Pagodien; when you come to the end of that, you will see the Island Pallendien ESE. from you; stand without it until you have the Point of Calmonye open with the Island Cannedien. The East Point of Cannedien is very flat off Shore, so that you must first edge somewhat nearer Ilbo de Gallo, or Pallandien, until the Point of Calmonye bears North East by East from you, and then steer with it until you come as nigh it as you think convenient to lie with your Vessel. From Hammon-hiel to Jaffnapatenam, without the Island.

A Description of the Coast of Coromandel and Orixá.

WEST North West 20 Leagues from Cape Comaroone, lies a Rock even with the Waters-Edge, it is about the Bigness of a small Vessel, on which it is supposed many Ships have been lost.

From Hammon-Hiel to Aderanpatenam.

From Hammon-hiel to Aderanpatenam. The Course is NW. and by N. 17 Leag. About 20 Miles from Cage lies a Sand, on which is not above 10 or 12 Fathom Water; you may know when you are near it by your Lead, before Aderanpatenam it is very flat all along the Coast to Lamiere or Kaliemere.

From Hammon-Hiel to the Reef of Kaliemere.

The Course is North by East 15 or 16 Leagues, in the

fair way you have 8, 9, and 10 Fathom, until you come near the Reef; with great Vessels you must come no nearer the Reef than 5 Fathom, when you are past the Reef, you may keep as near the Shore as you think fit, in 5 and 4 Fathom without any danger. When Pagoda Kaliemere bears WSW. and SW. by W. from you; then are you past the Reef to the N. ward of it, but when the Pagoda bears NW. from you, you are to the Southward of the Reef, and being about 4 Leagues off the Shore, you have 5 and 4 and a half Fathom sandy Ground.

From Point de Pedra to the Reef of Kaliemere.

The Course is NNW. or NW. by N. about 13 Leagues, in the fair way you have 8, 9, and 10 Fathom. From Point de Pedra to the Reef Kaliemere.

until you come near the shoal, to which you must not come no nearer than 5 Fathom, but with a Sloop or small Vessel as near as you think good.

From the Reef or Shore of Kaliemere to Negapatam.

From Kaliemere to Negapatam. The Course is North 9 Leag. and one third, you may keep as nigh the Shore as you will in 5, 6, and 7 Fathom there is no Danger. *Negapatam* is a City or Town, by which runs a River that empties it self into the Sea; about 4 Miles to the Northward of the Town stands a *Pagoda* whereby it may be known. You may Anchor before the River in 4, 5, and 6 Fathom, the *Pagoda* W. and by N. from you is a good Road; here is a *Dutch* Factory.

From Negapatam to Karical.

From Negapatam to Karical. The Course is North half West 14 Miles, you may sail along Shore; only keep a little off to the North Point of *Karical*. *Karical* is a River which is often dry, or but little Water; between them, 2 Miles from *Negapatam* is a small white *Moors Mosque*, near to a Village, upon a high sandy Down, and is called *Trummet Patenam*, but there is neither Road nor River.

From Karical to Trankebar, or Trinkumbar.

From Karical to Trankebar. The Course is the same 8 Miles; you may sail along the Shore in 6 and 7 Fathom, only mind to keep a little off the North Point, as above-mentioned. At *Trankebar* or *Trinkumbar*, the *Danes* have a Garrison, and the River runs out to the Southward of the Port, but it is many times dry.

From Trankebar, or Trinkumbar to Lowrepatenam.

From Trankebar to Lowrepatenam. The Course is North 8 Miles; it makes like a Fort, wherein are 3 or 4 *Pagodas*, it is known by that; you may keep within 9 and 10 Fathom, two Miles off.

From Lowrepatenam to Trimeldenaes.

From Lowrepatenam to Trimeldenaes. The Course is as aforesaid 2 Miles, there is a small River which is often dry, between them stands a small Tower called *Mocker Patenam*, you may keep along, and have 10, 11, and 12 Fathom.

From Trimeldenaes to Calderon.

From Trimeldenaes to Calderon. The Course is North 7 Miles, here lies off a Reef about four Miles into the Sea, so that hereabouts you must come no nearer than ten, nine, or eight Fathom; on the West side (or within) the Reef is a River which you cannot come at, until you be to the Northward of the Reef, and so turn it up to the Rivers Mouth within the Reef, but you must come no nearer the Reef, on the inside, than 6 or 7 Fathom, for both on the inside and off-side it is steep too. Therefore mind your Lead, and look out.

From the end of the Reef to Porto Nova.

From the end of the Reef to Porto Nova. The Course is North North West 4 Miles; between them are the 4 *Pagodas*; when *Porto Nova* bears West from you, and you are about 3 Miles off Shore, then will the two Southermost *Pagodas* be shut in one with the other, so that you shall see but three *Pagodas*. You may come to an Anchor before the River as you please, with respect had to the Burthen of your Ship or Vessel; the River runs out about two Miles to the Northward of the Town or small City; there is but little Water in the Channel, only a small River or Brook.

From Porto Nova to Tegepatenam, or Fort St. David, being an English Factory.

From Porto Nova to Tegepatenam. The Course is N. half E. you may keep along Shore in 10, 9, and 8 Fathom, 4 Miles Offing. *Tegepatenam* may be known by a Fort belonging to the *Moors*; it is on the N. side of the River, and is built of red Stone; on the N. side of the River lies out a Spit, which you must

have a Care of. The *Dutch* Factory is about a Cannon-shot to the Northward of the Fort, in the Village you may Anchor before it in 4, 5, and 6 Fathom, the Factory W. and by N. from you; there is also, about 4 Miles up in the Country, a great *Pagoda*, by which the Place is known.

From Tegepatenam to Pullecheire.

The Course is NE. and by N. half N. 14 Miles, it is From *Tegepatenam* to *Pullecheire*. a *Gentue* Town; there is a small River on the S. side of the Town, and on the N. of the Town there lies a high Ridge which is called the Ridge of *Pullecheire*; between *Tegepatenam* and *Pullecheire* you must keep about 4 or 5 Miles off Shore, in 6 or 7 Fathom.

From Pullecheire to Callemorye.

The Course is NNE. 12 Miles, there is a small *Moors* white Temple, whereby *Callemorye* is known; you keep 4 Miles Offing from the Shore, in 10 and 12 Fathom sandy Ground, under the Shore is pretty deep.

From Callemorye to Allenparwe.

The Course is as aforesaid, 14 Miles, here is a River but many times dry; the Village lies on the North side of the River, and you may know it by 2 thick Groves, at the South-end whereof is a great Tree: You keep along Shore in the aforesaid Offing and Depth, because under the Shore it is very deep.

From Allenparwe to the long Grove or Wood.

The Course is NNE. 8 Miles. This long Grove or Wood is 4 Miles in length, and lies along the Sea-side ENE. as aforesaid; at the North-end of the said Grove stands a small *Pagoda*, called *Conymere*, and there lies off a Reef of Sand which stretches to the Northward about one Mile into the Sea, you keep along the Shore in about 4 Miles Offing, in 10 or 12 Fathom at *Conymere* is an *English* Factory.

From Conymere to Sanderasspatenam.

The Course is North East, somewhat more East, 6 Miles; there is two *Pagodas*, with a thick Grove to the Southward of the *Pagodas*, which makes it known, there is no River. You may Anchor there in 7 or 8 Fathom a large Cannon-shot from the Shore.

From Sanderasspatenam to the seven Pagodas.

The Course is as aforesaid 6 Miles, there stands five *Pagodas* up in the Country, and two near the Sea; here the Land is high, but with great Intervals, or Saddles. Between these two places, you keep about 4 Miles Offing, in 10 and 12 Fathom; but when you come near the *Pagodas* you meet with stony Ground until you have past them about 4 Miles.

From the seven Pagodas to Cabelon.

The Course is N. by E. and NNE. 16 Miles; to the Southward of *Cabelon* lies a shoal of Sand which stretches near 2 Miles into the Sea. *Cabelon* may be known by a small white *Pagoda* that stands on the Sand down close by the Village, which you can just see as you sail along Shore.

From Cabelon to St. Thome.

The Course is N. by E. 10 Miles; it was formerly a *Portuguese*, afterwards a *French* Garrison; up in the Country you see several Hills, Latitude 13 deg. 00 min.

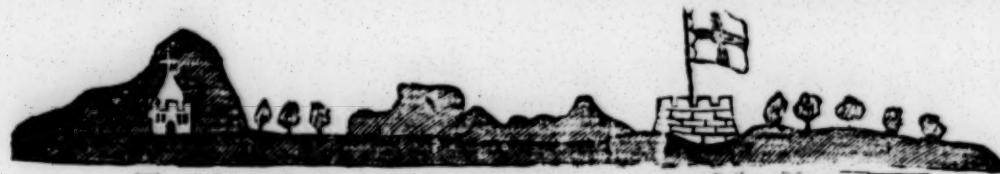
From St. Thome to Madraffapatam, or Fort St. George.

The Course is as before observed 4 Miles; you keep along Shore as aforesaid. Here the Honourable *East-India* Company have a Garrison.

St. Thome NW. by W. N. ly.

NW. half N.

N. Fort St. George, 13 Miles off shews thus.



Thus sheweth the Land between Fort St. George and St. Thome.

From Madrasapatam to the Reef of Monnoes.

From Madrasapatam to the Reef of Monnoes.

The Course is NNE. 8 Miles; you may know it by a small Grove of Trees, which on the Top are flat and even like a Table. You may sail along shore in 9 and 10 Fathom sandy Ground; about 4 Miles Offing, in twelve or thirteen fathom you have stiff Ground, the Flag-staff bearing WNW. a quarter N. about a Mile and a half off you may Anchor.

From Monnoes to the Reef of Natoer, (or the small Table.)

From Monnoes to the Reef of Natoer, or the end of the Land Reef.

The Course is NNE. eight Miles, keep by your Lead in 9, 10, 11, and 12 fathom until you come into stiff Ground, and then hold the same Course, until you bring two Cocoa or Palmera Trees (which you will see) in one with a small Grove; then are you at the end of the Land Reef in a large Leag. or 4 Miles Offing; you may still hold the same Course until you have opened those Palmera Trees again, off the Grove about a Handspikes length, and then steer NE. in six and five Fath. until you have past the Sea Reef, then you will find seven, eight or nine fathom, sometimes stiff Ground, and sometimes Sand.

Directions for the Land Reef of Monnoes.

Note. As you sail along shore you must take special Care, and mind the Marks of this Land Reef; for it is very deceitful, and shoals all of a sudden, by whole Fathoms, as fast as you can heave the Lead, but if you find and observe the Alterations of the Depth of Water, you may be sure you are drawing near the Reef, of which the Trees will give you notice; you must come no nearer it than 10 or 9 fathom, if you come any nearer you will find yourself at a loss; for if you come into 6 fath. your next throw or cast

will be but 3 fath. or 17 feet; so that with a great Ship it is very dangerous, tho' it is not shoaler than 14 or 15 feet. This Depth is about 2 Miles off shore, and it is in breadth about 2 Musquet-shot over; the Soundings within it are as uneven as the afore said, 2, 5, 6, and 7 fathom.

Note. That the end of the Land Reef, and Sea Reef bears from each other NE. and by E. and SW. and by W. near two Miles, the Sea Reef lies along Shore NE. by N. and SW. by S. 8 Miles Offing will carry you without it, along the edge of it in 8, 7, and 6 fath. but not to come any nearer before you have the Flag-staff W. and by S. from you, and then you may safely stand over the Reef towards the shore with a Southerly Wind, but with a Northerly Wind the Flag-staff must bear good SW. from you, with Ships that draw 13, 14, 15, and 16 feet Water, but with small Craft of 9 or 10 feet, you need take no notice of the Sea Reef, for there is no less than 16 or 18 feet upon it, yet it is more secure with those that are not well enough acquainted, to keep the Channel to go without all, rather than over.

From the end of the Sea Reef to Pullacat before the River.

The Course is NW. and by N. seven Miles; two Miles to the Southward of the River is the Fort *Galdeira*, where you commonly anchor in 5, 6, and 7 fath. according to the Burthen of your Ship, up in the Country there is a long Mountain, on the South-end whereof is a Saddle, whereby you may know it: To anchor, bring the Flag W. a quarter N. about 6 Miles off, 8 fath. Latitude 13 deg. 30 min.

Description of the Sea Reef and Land Reef.

From the end of the Sea Reef of Natoer, to Pullacat.

SW. by W.

Pullacat, W. by S. $\frac{1}{4}$ S.

W.



Thus sheweth the Land about Pullacat.

From Pullacat to Cycarahoerye.

From Pullacat to Cycarahoerye.

The Course is N. and by W. eight Leag. to the Northward of *Pullacat* lies a Reef like the Reef of *Monnoes*, but it stretches farther along shore, and full as far into the Sea. From the North-end of this Reef, there lies another Reef, along shore, about ten Leagues long, and lies about eight Miles off shore, and stretches the inside N. and by E. and S. and by W. You may sail between the Reefs on the S. and in three and a half and four fathom sandy Ground; but if you are to sail between the Reef and the Main borrow off the Shore, for the Reef is deceitful, and mind your Lead well.

From Pullacat to go without the Reef.

The Course is N.N.E. keep by your Lead along the edge of the Reef in 12, 10, 9, and 8 fathom, no nearer, because it is very uneven Ground; if you deepen your Water to about 12 Fathom, you must edge in again to 9 Fath. or somewhat less, which is the best Depth, if you must keep the Reef aboard, to go to *Macklepatenam*; for the Streams in the Months of *June*, *July*, and *August*, sets NE. and by N. and somewhat more Easterly; if you intend to hold your Course right through, it is best to steer due North, after you have passed the Reef *Armygon*, which will bring you in with the Shore, about *Pittypoly*, and then you must keep along, that so you may stretch it off again, into the Sea; close aboard the Reef of *Mecha* breaks, which you may come as near as you please in 9, 8, 7, 6, and 5 fathom, but no nearer; when you are past this Reef, it deepens all of a sudden; then you may steer N. and by W. and NNW. about four Leagues into the Road; when you are in the Point of *Mecha*, you will find it gradually shoal, until you come into the Road, where you may anchor in 7, 6, and 4 Fathom, according to the Burthen of your Ship.

From Cycarahoerye to Armygon.

The Course is North North West eight Leagues, on the North-side lies a small Hill not far up in the Country; here you may see the high Land of *Pullacat*, bearing South South West from you. There is a Factory belonging to the *English* which shews very white at a great Distance, whereby you may know it, you may keep in 5 or 6 Fathom, stiff Ground, or 7 Fathom Sand.

From Cycarahoerye to Armygon to Lat 14 deg 4 min.

From Armygon to Caletore.

The Course is North somewhat Easterly, six Leagues and two thirds, you must keep two Miles Offing, in nine, ten, and twelve Fathom Sand.

From Armygon to Caletore.

From Caletore to Point Penny.

The Course is as above said eight Leagues two thirds. Here just between them both, lies a Reef about 4 Miles off shore, which is very dangerous, so that you must mind to keep six or eight Miles Offing in sixteen or seventeen Fathom stiff Ground.

From Caletore to Pt. Penny.

From Point Penny to Carera.

The Course is North and by West ten Leagues and a half, here is two Ridges of high Land, which on the Top is very smooth, and *Carera* lies on the Northernmost, there is a River, but little Water in it; in the Village stands a white Pagoda, and to the Northward up in the Country, is a high Land, which may be seen twelve or thirteen Leagues at Sea, whereby you may know it.

From Pt. Penny to Carera.

+

From

From Carera to Gondegam or Goedagan.

From Carera to Gondegam or Goedagan. The Course is NE. and by N. about 20 Miles, there lies off a Shoal somewhat from the Shore; with small Vessels you may pass within it; there is a Pagoda in the Valley, by which you may know it.

From Goedagan or Gondegam to Montipoly.

From Goedagan or Gondegam to Montipoly. The Course is North East sixteen Miles; to the Eastward of *Montipoly* is a Thicket of *Palmera* Trees, four Miles in length; to the Eastward of that are a small parcel of Trees, about 20 or 30 in Number, but shew themselves to be a great deal higher than the long Thicket, whereby it may be known. You keep along shore in eight, nine, and ten Fathom stiff Ground, in four Miles Offing and better.

The Reef of Montipoly. Note, From *Montipoly* South East and by East sixteen Miles in the Sea, lies a Shoal or Spit of Sand about eight Leagues long, and stretches South West and North East. You need not be much afraid of it, for it affords good Soundings, the Southermost end is shoalest, but no less than four or three and a half Fathom; they who come hereabouts may keep their Offing according to what Water the Ship draweth; you may sail with great Ships between the Main and the Reef in 8 or 10 Fathom stiff Ground; but as you come near the Reef you will find sandy Ground, so that it is easy to discover it, if you keep the Lead going.

From Montipoly to Petipoly.

From Montipoly to Petipoly. The Course is E. N. E. seven Leagues. The River is about two Miles to the Westward of the Town; right

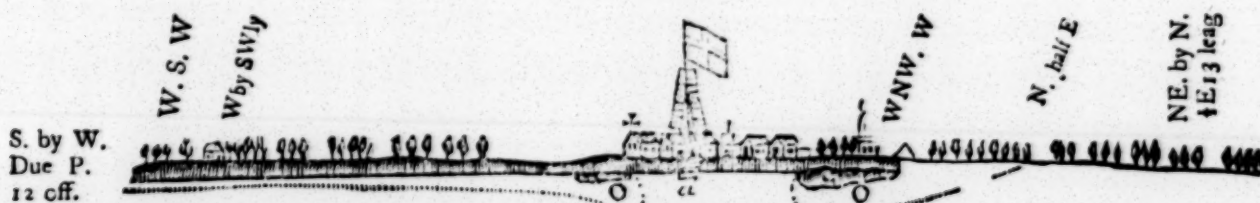
over the Town is a Grove of *Palmera* Trees, which seem to be very flat like the Top of a Table, it is called the Table of *Petipoly*. You sail between these two Places in 6 or 7 Fathom in eight Miles Offing, stiff Ground.

From Petipoly to the Point of Metha, or Due Point.

From Petipoly to the Point of Metha or Due Point. The Course is East nearest thirteen Leagues, there is between them two Rivers and two Reefs, it is very low marshy Land; from *Petipoly* you must keep between three and four Leagues Offing, in eight, seven and six Fathom, but when you are nigh to Point *Metha* or *Due*, you must keep within eight Miles of the Shore, in the afore said Depth. When you find sandy Ground, be sure come no nearer the Reef of *Metha* or *Due*, let it be in no less than 6 Fathom with a great Ship; for from side to side it is steep too, it lies along East and West.

From the East-end of the Reef, in nine or ten Fathom to Methlepatam, or Massulipatam.

From Methlepatam or Massulipatam. The Course is North West and by West, and West North West eighteen Miles, you may anchor in the Road in four, four and a half, or five Fathom, according to what Water your Ship draws. There is a flat a great way off, and on the West-side of the Town a great Tree, when that bears West, you are in the best of the Road. Between the Point of *Metha* and *Massulipatam* there are two Rivers to the Northward of the Point, Latitude of 16 deg. 15 min. North.



This Row of Trees are the first when you come from the Southward, and luff towards *Due Point*.

Thus sheweth *Massulipatam*, as you ride in the Bay, depth four Fathom at low Water, and four or five Foot on the Bar. *a* is the Bankfall, or Landing-place. *OO* are two Islands, one on each side the Harbour.

From Methlepatam, or Massulipatam-Road, to Nassipore, or Nassipore.

From Methlepatam or Massulipatam Road to Nassipore or Nassipore. The Course is East North East fourteen Leagues; on the North-side of the River runs a Reef of Sand, at least four Miles into the Sea; but you may venture upon it by your Lead, in six, five, and four Fathom, but no nearer; upon the Bar before the River is sometimes ten and twelve Feet, and sometimes no more than seven or eight; and on the West-side of the River there lies a Shoal; it is not so far in the Sea as on the other side, so that you may sail into the River between the two Shoals, but with the Flood you must keep up with the Tide, because otherwise it will drive you upon the East-shore. When you are near the Bar, you will find five and six Fathom. Within the River is a great Tree on the East-side. When you have brought that Tree North and by East from you, then are you in the Mouth of the River or Channel. Two Leagues to the Westward of the River is the Bay of *Hamelde*, or *Ombelde*, here many Times great Ships are hauled up to be new sheathed, that cannot go into the River without the Bay. Eight Miles from the Shore it is shoal, and but three and three Fathom and a half soft Ground, so they who fall in with the Shore need not be afraid, only mind their Lead.

From Nassipore to Point Gord-Ware, or Jundewary.

From Nassipore to Gordware or Jundewary. The Course is East North East fifteen or sixteen Leagues. You may keep along the Shore, in twelve, fourteen, or sixteen Fathom, in two Leagues and two thirds Offing. About four Miles to the Westward of the Point of *Gordware* is three Pagodas, which are white; and to the Eastward of the Pagodas, is the River of *Visseron*. Eight Leagues to the Eastward of *Nassipore* are two white Pagodas, which sometimes are taken for the Pagodas of *Gordware*. They are but two Miles distant. Off the Point of

Gord-Ware lies a Reef at least 4 Miles into the Sea; you must come no nearer the Reef than twelve Fathom, for it is steep too, and hath uneven Soundings as you come from the Westward; but coming from the Eastward you may venture upon it by keeping your Lead going, in six and seven Fathom sandy Ground, but come no nearer.

From the Point of Gord-Ware to Nassipyle.

From Nassipyle to Gordware or Nassipyle. The Course is North and by West fourteen Miles. *Nassipyle* is a great River: There lies on each side a Reef at least four Miles into the Sea, but you may borrow on it by your Lead, to six, five, or four Fathom, but no nearer.

From Nassipyle to Coringa.

From Nassipyle to Coringa. The Land lies in a Bay, along North North East, and South South West, seven or eight Leagues.

From Gord-Ware, to the Point Watfare, or Wotire, thwart the Bay.

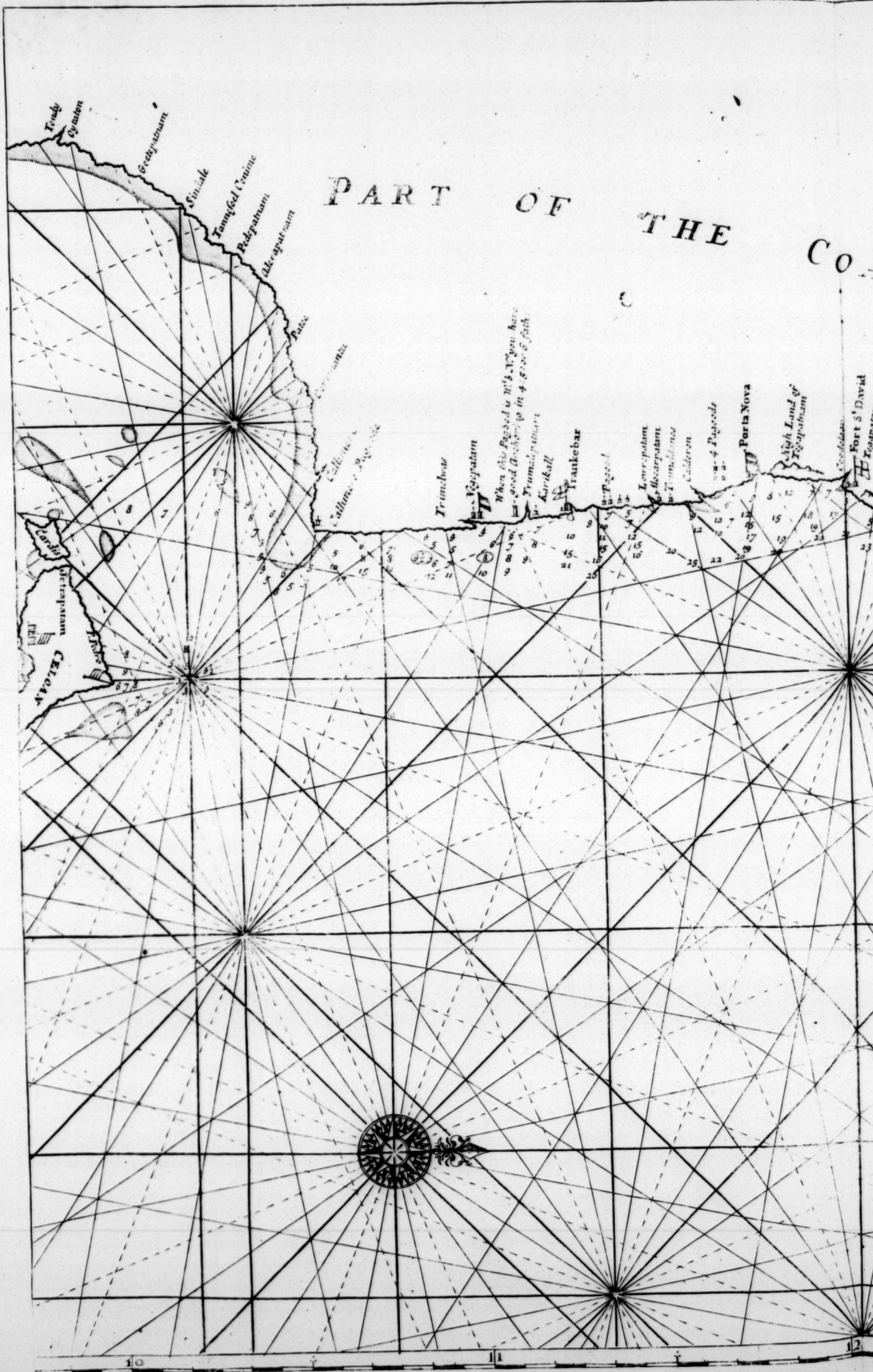
From Gordware to the Point Watfare. The Course is North East thirteen Leagues and a half. You may know *Watsfare* by a small Hill. Hereabouts you have high Land, such as you have to the South of *Watsfare*; and about thirty-two and thirty-five Fathom soft Ground, about five Leagues Offing. Near the Shore, in two Miles Offing, you have twelve and fourteen Fath. sandy Ground, with small Shells.

From Watfare or Wotire to Panary.

From Watfare or Wotire to Panary. The Course is East North East six Leagues and two Miles. You may keep along Shore in two Miles Offing, and in nine, ten, and eleven Fathom Water, sandy Ground; if in about fifteen Fathom soft Ground *Panary* is known by a small round Hommock on the Strand; to the Westward of which is a small Bay; and a small Creek or Rivulet for small Boats.

Map Room Cat

25



A Large Chart
Of Part of the Coast of
COREMANDELL
from Point Pedro to Armegon

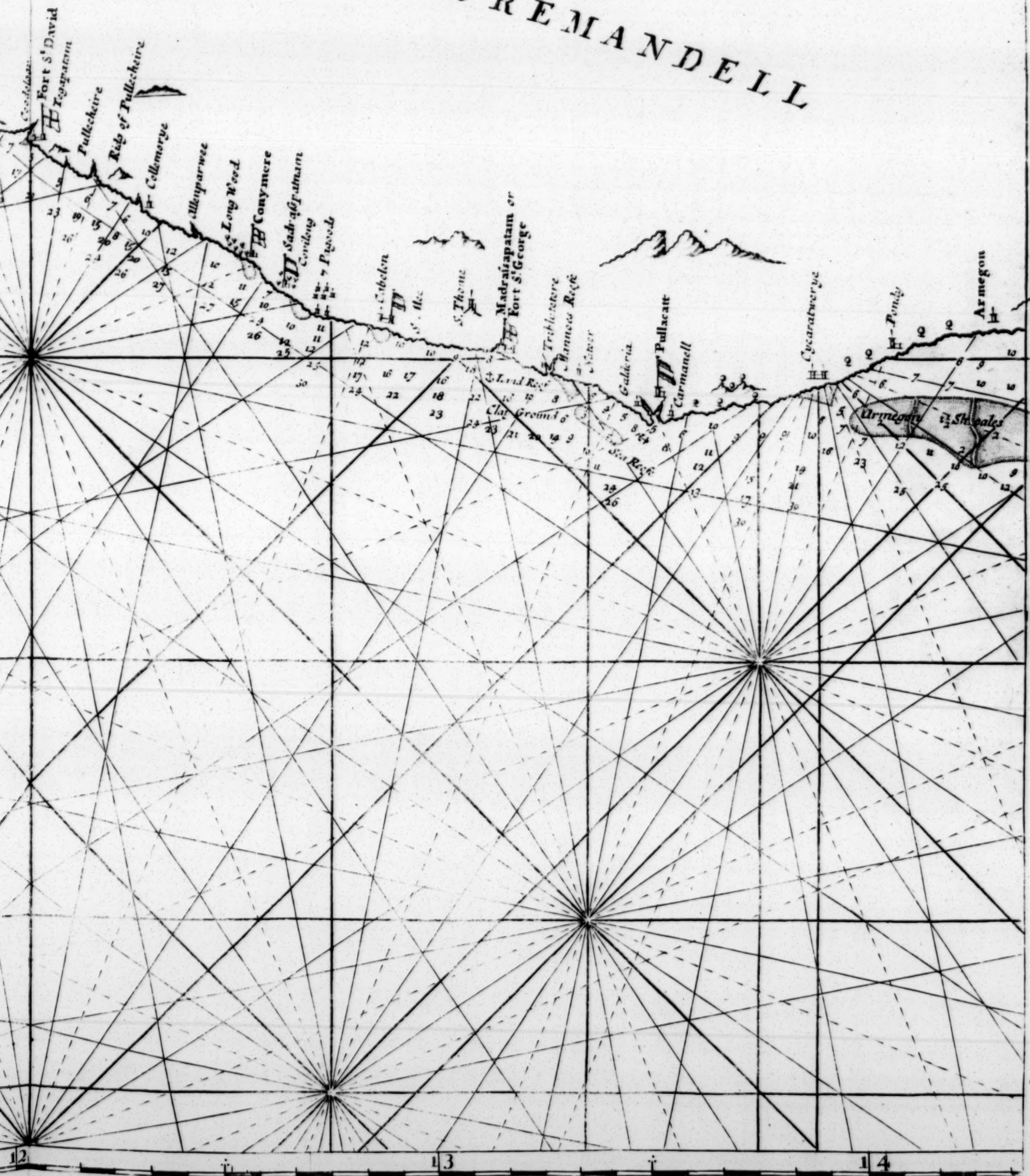
*Corrected and compared
with the French Charts published
in 1745.*

A Scale of Twenty English Leagues

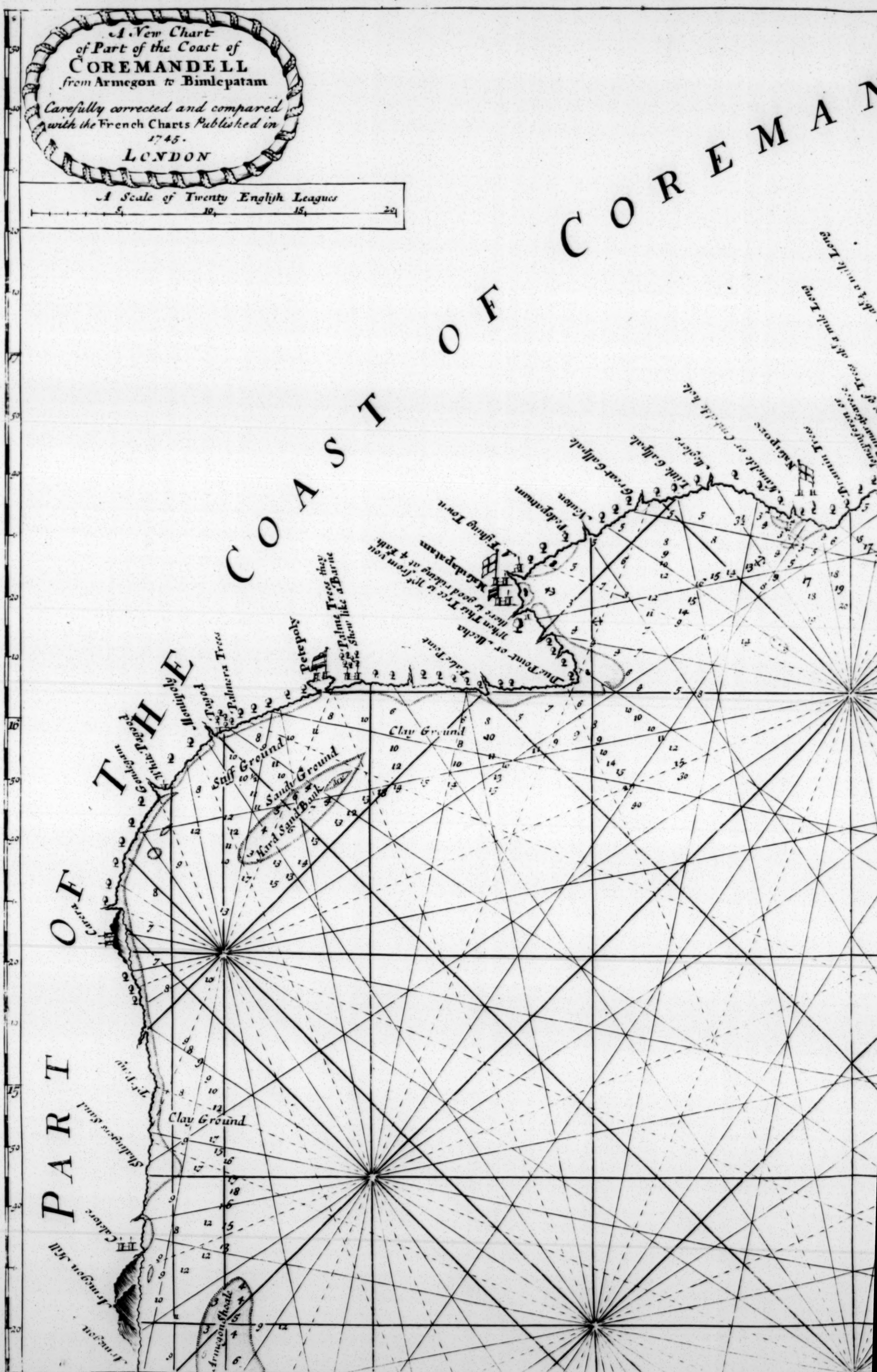
COAST

OF

COREMANDELL



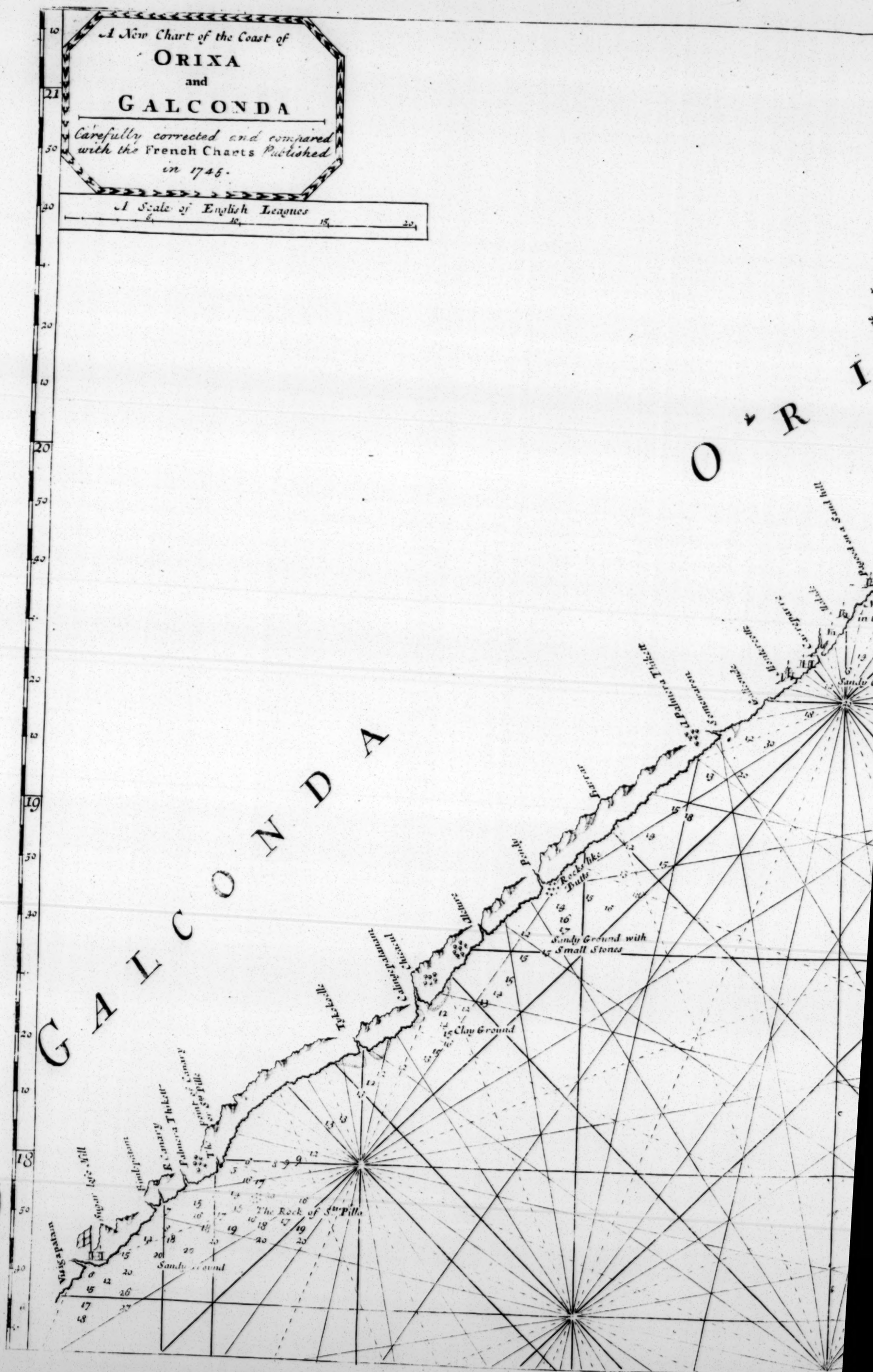
LONDON

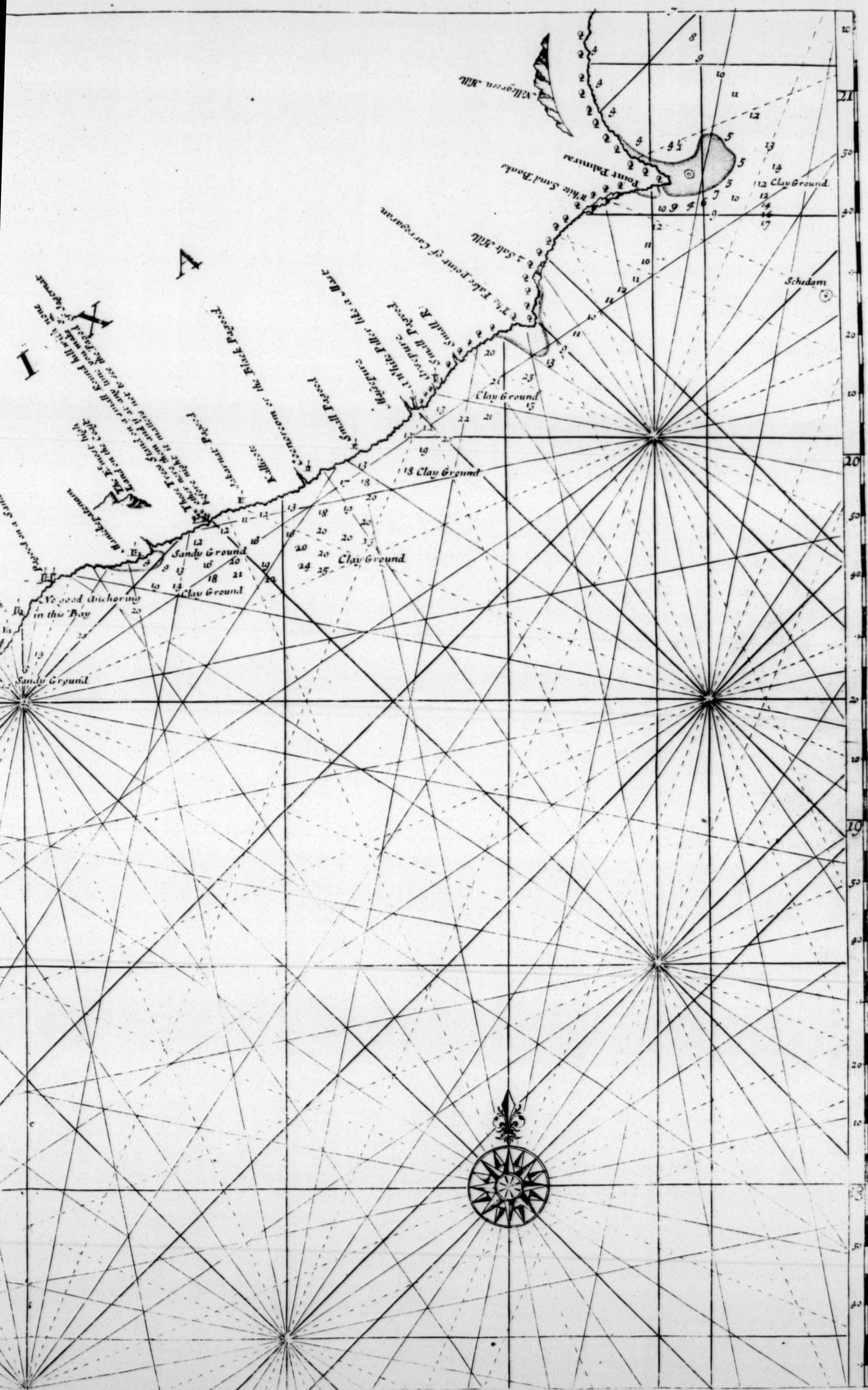


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Carefully corrected and compared
with the French Charts Published
in 1746.

A Scale of English Leagues





A Description of the Coast of Coremandel.

From Panary to Pandymarca.

From Panary to Pandymarca. The Course is, as above said, 2 Leagues. Here lie 9 or 10 great Rocks, about a Musquet-shot from the Main, high above Water; and 3 or 4 great Rocks upon the Strand, whereby *Pandy* is known. If you keep along Shore in the aforesaid Offing, you will have sandy Ground and small Shells.

From Pandymarca to Vytegepatenam, or Vifiagapatam.

From Pandymarca to Vytegepatenam or Vifiagapatam. The Course is East and by North 8 Leagues. You keep along the Shore; in the same Offing and Depth you have fine clear sandy Ground. *Vytegepatenam*, or *Vifiagapatam*, may be known by a great high Mountain at the Sea-side, there being no *Strand* before it. To the Northward of the said Mountain is a small Bay, where you may Anchor, but nearest the North Shore. The River empties itself on the South side of the great Hill, and the other on the North-side of the small Hommock, whereon stands a small white Temple, which, coming from the Westward, you cannot see before you are past the great Hill.

From Vifiagapatam to Bimlepatam.

From Vifiagapatam to Bimlepatam. The Course is North East fourteen Miles. You may know *Bimlepatam* by a long Mountain that lies to the Eastward, with its End to the Seaward; and on the West side, six Miles from *Bimlepatam*, lies a round small Hill or Hommock, like a Sugar-Loaf, on the Strand. When you are past that you may see the Factory that stands on the West side of the River. You may Anchor in six, seven, and eight Fathom, soft Ground, the Factory West and by South from you.

From Bimlepatam to the River of Canary.

From Bimlepatam to the River of Canary. The Course is North East and by East 8 Miles. You must keep along Shore in seven, eight, or nine Fathom, but go no farther to Seaward than 9 Fathom.

From the River Canary to the Point of Santipelle, which is often called the Point of Canary.

From Canary River to the Point of Santipelle. The Course is as above, 4 large Miles. Here lie the Rocks of *Santipelle*, two Leagues in the Sea. To the Eastward of *Canary* is a *Palmera* Thicket, from which the Rocks lie South East by East. Up in the Country lies a small Hill, and on the *Strand* another whereby it may be known. They who have a mind to go between the Rocks and the Main must keep no farther Offing than in 9 or 10 Fathom; no nearer the Shore than 5 or 6 Fathom; the best is to keep in 7 and 8 Fathom, then there is no Danger. If from *Bimlepatam* you will go without these Rocks, you must come no nearer than 16 or 17 Fathom, but the best Depth to keep in is 20 Fathom, and so you will be sure to pass 2 Leagues off them, because near the Rocks the Current sets strongly off and on, so that there is no Security in borrowing any Thing near them.

From Santipelle or the Point of Canary to Tikokoelle.

From Canary Point to Tikokoelle. The Course is North East half East 12 Leagues; the Land between them lies somewhat in a Bite. *Tikokoelle* is a River where stand 4 or 5 great Trees, with a few *Palmera* Trees, whereby it may be known. You commonly keep 4 Miles Offing, in 12 and 13 Fathom sandy Ground.

From Tikokoelle to Calengepatenam.

From Tikokoelle to Calengepatenam. The Course is North East somewhat Easterly 4 Leagues and two thirds. To the Northward of it stands 3 or 4 great Trees, by which you may know it. Four Miles off Shore is 15 Fathom, soft Ground.

From Calengepatenam or Calingepatam, to Alefare or Aleture.

The Course is North East 6 Leagues. Between these 2 Ports stand two parcel of Trees, each parcel being about

twenty in Number, by which it may be known, and the Shore is indifferent rounding in a Bite. You must keep in 14 and 15 Fathom, and about 4 Miles Offing, then you will see the high Land of *Pondy*.

From Alefare or Aleture to Pondy.

The Course is NE. 5 Leagues and one third. You may know *Pondy* by 10 or 12 Rocks which lie close under the Shore, right before the River. You have a very high ragged Land up in the Country, and near the Sea-side, indifferent high and ragged. You have along Shore 15 and 17 Fathom sandy Ground, mixt with small Stones, in 4 Miles Offing.

From Pondy to Barrar.

The Course is North East somewhat Easterly 5 Leagues and one third. You have still ragged Land. You keep along Shore in 4 Miles Offing, 15 and 16 Fathom, sandy Ground.

From Barrar to Somme-warron.

The Course is North East half East. Eight Leagues to the Southward of the River is a *Palmera* Thicket, seemingly a Cannon-shot in Length. A little to the Southward of the River is a small Copse, which is very smooth on the Top like the Table of *Petipoly*, and to the Northward you have very high Land, where are five Saddles by which it is known. Eight Miles off of the Shore it is pretty deep, being twenty and twenty-five Fathom, but nearer it shoals off suddenly.

From Somme-warron to Campare, or Carreparre.

The Course is North East half East 18 Miles, and between them is no Beach, except just at the Mouth of the River. On the South-side is the *Fort Manterkotte*; upon a small round Hommock, which is the utmost Bounds of *Galconde*. From hence you have no more high Land. Eight Miles to the Northward of *Campare*, close by *Malade*, is high Land, and a Fort upon a small smooth Hill. Keep 4 Miles Offing, and in 13 and 14 Fathom, sandy Ground.

From Campare to Manchepatenam, or Manickepatenam.

The Course is North East and by East 8 Leagues and two thirds; between these two Places the Land forms a Bay; and with a South Easterly Wind it ought to be avoided, there being scarce any Anchor Ground, except 8 Miles to the Southward of *Manchepatenam*, where it is shoal; on the South side of *Manchepatenam*, lies a shoal of Sand, which stretches to the Northward of the River 2 Miles into the Sea; you have but 4 Fathom Water upon it; you may know *Manchepatenam* by a small Pagoda, which you may see over the Down, and overhangs as if it were ready to fall.

From Manchepatenam or Manickepatenam to Jan-Gamael or Jakara-Nat.

The Course is East North East half East 6 Leagues: Between them is low Land; you must keep 4 small Miles Offing from the Shore, in 11 and 12 Fathom, sandy Ground, in 6 Miles Offing, is 16 and 20 Fathom, soft Ground; *Jan-Gamael* is a white Pagoda, which makes at a Distance like a Sail, and stands close by the Sea-side; a little up in the Country there is a great Town.

From Jan-Gamael, or Jakara-Nat, to Camaron, or the black Pagoda.

The Course is East by North, 12 Miles; between them is low Land, keep about 3 Miles Offing, in 12 and 13 Fathom sand, and in six Miles Offing you will have 18 and 20 Fathom, soft Ground.

From the black Pagoda, or Camaron, to the small Pagoda.

The Course is East North East, distant 4 Leagues; between

the Night come on before the Flood be spent, you must haul up E. and E. by S. for half a Glas, into 6, or 6 and a quarter of a Fath. Water, soft oozy Ground, and there anchor to wait the next Day's Flood; for hereabouts there is no failing by Night in great Ships with the most experience'd Pilot.

Secondly, Supposing that you cannot get so far as to be abreast with the head of the *Barabullo*, you may with the first of the Flood, before the Tide makes strong up, or that your Ship winds to the Tide, get up your Anchor and continue your Course NE. by E. and NE. until the N. end of the *Sagor* bears E. by N. or that the *Barabullo* Tree on the West shore, which makes like a *Kittisaul*, spread open, bears NW. Thence you ought to steer N. and N. by W. leaving the Breakers of the *Parabullo* on your Larboard-side, distant 3 quarters of a Mile, and this Course will carry you to *Kidgare* River's Mouth. You ought to take notice that the Breakers of the *Barabullo* lie about 4 Miles off the Western shore, and bear SE. and NW. with the *Kittisaul* Tree, and N. and S. with the Grove of Trees, which I call the long Wood, and stands to the Westward of the Entrance of *Kidgare* River.

Thirdly, Off the East Point of *Kidgare* River runs a Flat, a large quarter of a League into the Offing, which is steep too; and therefore so soon as the River is open, you ought not to come nearer the Shore than within a large half League, but when you have past the River's Mouth, you ought to edge in again towards the Shore; so that before you come up with the River of *Cowcolle*, you may not be more than a Mile off the Shore.

Fourthly, The head, or North-end of the long Sand, lies 2 Miles East by South from the Mouth of the said River *Cowcolle*, and between that Head and the Shore lies the Passage; but close aboard the long Sand, for there is of late grown up a Bank of Sand betwixt the long Sand and the River's Mouth, which also is dry at low Water upon Spring-tides, and renders the Passage both narrow and dangerous; so that before a Vessel of Burthen ventures thro', it will be requisite for you to order the Shallop that attends you to Anchor upon the Pitch of the long Sand-head, and one of the Ship's Boats to be placed at a grappling on the E. edge of the said new Bank, and so the Ship at half Flood may pass between them. This is one way to go safely thro' it.

The other supposing a great Ship not to have a Shallop to attend her, (which indeed I take to be far the safest way, tho' she had one) is to stay at an Anchor about a Mile and a half short of *Cowcolle* River, until a quarter Ebb, at which time the long Sand will be dry. You must order it so as to be under Sail before it be quite low Water, and range the Dry-head of the long Sand, fair aboard, in 5, 4, and 3 Fathom Water; for if you edge off to the Shoreward but a good Cable's length, you will shoal your Water to 3 Fathom on the edge of this above-said new Sand, but the long Sand-head hath Water enough close aboard of it, where it lies highest and driest, and at the time of a slack Tide, has no danger, provided you mind your Steerage.

Fifthly. As soon as ever you have past the long Sand-head, you will find 10 Fathom Water on a sudden, and then you must immediately haul in for the Western-shore, towards *Kidgare* River's Mouth, that so you may avoid the Peck of the *Mizen*, which is the Part of the Sand that lies open with the said River's Mouth, about a small Mile and a half in the Offing, which is very steep on the South West-side of it, and lies East by North, and West by South with the great Trees, that encompass *Kidgare*. So soon as you have the above-said Trees of *Kidgare* Fort WSW. from you, then immediately put over for the Eastern-shore, steering with the Tide of Flood under Foot, ENE. or E. and by N. until you get hold of the *Mizen* or *Mizen*, which will be a Weather Sand, and conduct you with all desirable Security over the Eastern-shore, or along by it, with Discretion, according to the scantiness, or frankness of the Wind, your Course being not so much to be minded, as the careful edging on upon, or off from the said Sand, which with the Flood, has no danger on this side of it, only when *Gillingham* River bears from N. half E. to N. and by W. This Sand has but little Water on it, at low Water it shoals very gradually, so that you may edge off from it, as Occasion shall require, that so always to be able to fetch close under the Eastern-shore, at least a Mile and a half before you come up *Jeffere* River, formerly

called the *Channel-Creek*; for this last Year, as the N.E. Point of the *Mizen* is much worn away, so the *Gillingham* Sand, which formerly reached no lower than *Jeffere* River, is now so encreased, that it comes down as low as the small Creek, next to *Kidgare* River, and has rendered the Channel so extremely narrow, that with the Flood of the *Mizen*, it would be impossible for you to keep in the Channel, or prevent being carried on the *Gillingham* Sand, whence there will be no getting off with the Flood, and, besides the Danger, you will find difficulty enough to get off with the first of the Ebb.

Sixthly, From a large Mile and a half below *Jeffere* River the Channel lies close aboard of the Main, between the Eastern-shore and the *Gillingham* Sand, and hath no danger at all with the Flood, provided you be not drove off from it; for it must not be left until you have past the River of *Rangafoula*, which lies in the Bight about half way between *Jeffere* River, and the River of *Cuipa*, and then so soon as you have past *Rangafoula* River, you will have the middle of the Grove on *Buffalo* Point bear NNW. from you, and ought to stand over for it, on the NE. side whereof is good Riding in 5 and a half or 6 Fath. in the SW. Monsoon, if you have no Inclination to venture your Ship any higher up; but if you are resolved for the River *Hughley*, only stop there for the next Day's low Water, that so weighing with the first of the Tide, you may be sure of Flood enough from thence to enter the River *Hughley* with, and not be obliged to let go your Anchor in the narrows, where it is deep Water, and an excessive Tide to strain your Cable.

Seventhly, To sail from *Buffalo* Point upwards it is necessary to range the Eastern-shore fair aboard to avoid the Point of the *Diamond* Sand, which lies within a Cable's length of a small Creek on the said Shore, and is not to be come nearer than 7 Fathom; so soon as you have past the said Creek, you must trim sharp, and haul up NW. by W. for the lower Point of the Narrows on the Southern-shore, which said South-shore, with the S. Westerly Winds, it will be necessary to range, until you begin to open *Hughley* River, and then steer directly in NNE. having a Care of the Eastern Point of the said River, and of the Eddies, which commonly, at half Tide, are very troublesome thereabouts, by reason of the Division of the Stream into that, and the River of *Tumberlee*.

To enter with smaller Ships through the Inner Channel.

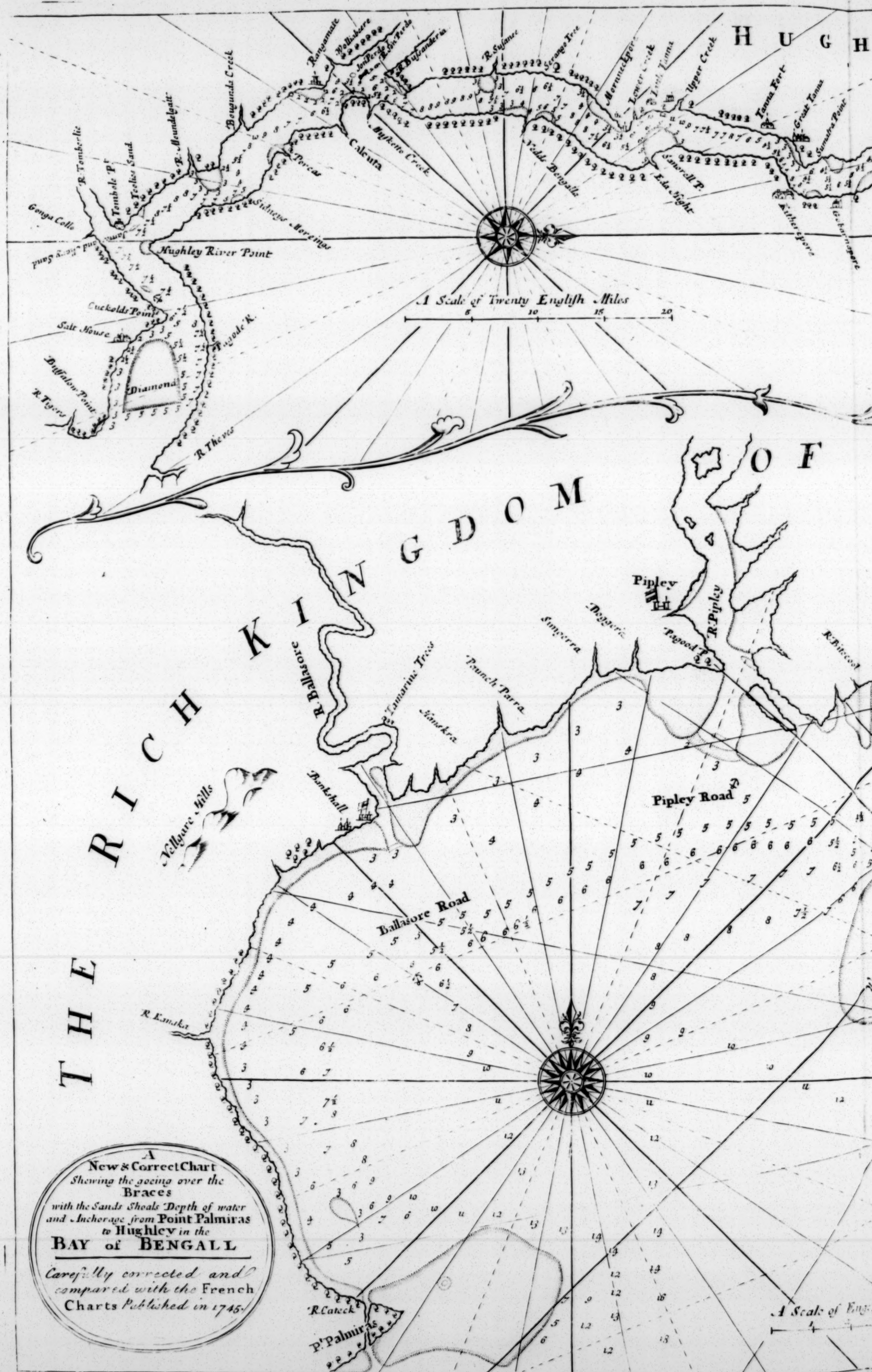
From *Ballafore* Road to the Foot of the Western Brace, it is best to observe the foregoing Directions, only with this difference, that from your Station of Anchorage, 2 Leagues and a half short of the said Brace, you may weigh with the first of the Flood; for if a Ship draws not above 12 Feet Water, there will be Water enough for her by that time, and when you find your self enter'd upon it, 3 leagues and a half Offing from the shore, as aforesaid, then steer over it ENE. and as soon as you find Salt Trees bears NE. and by E. then steer towards the Shore NE. and by N. but come no nearer Salt-River Point than within 3 or 4 Miles, keeping always in soft Ground, and being past that Point, keep about 2 Miles Offing from the shore, steering N. E. and by E. which will carry you in that distance in 3 and a half or 4 Fath. at three quarters Flood, but do not covet a greater Offing than *Barrabullo* head, to be left a Mile and a half to Seaboard of you on your Starboard-side, and when you are up with *Kedgalle*, then proceed as before directed with great Ships.

Directions for carrying up Ships from Ballafore Road into the River of Hughley, through the New Deep, provided they have no less than two Shallops to attend them.

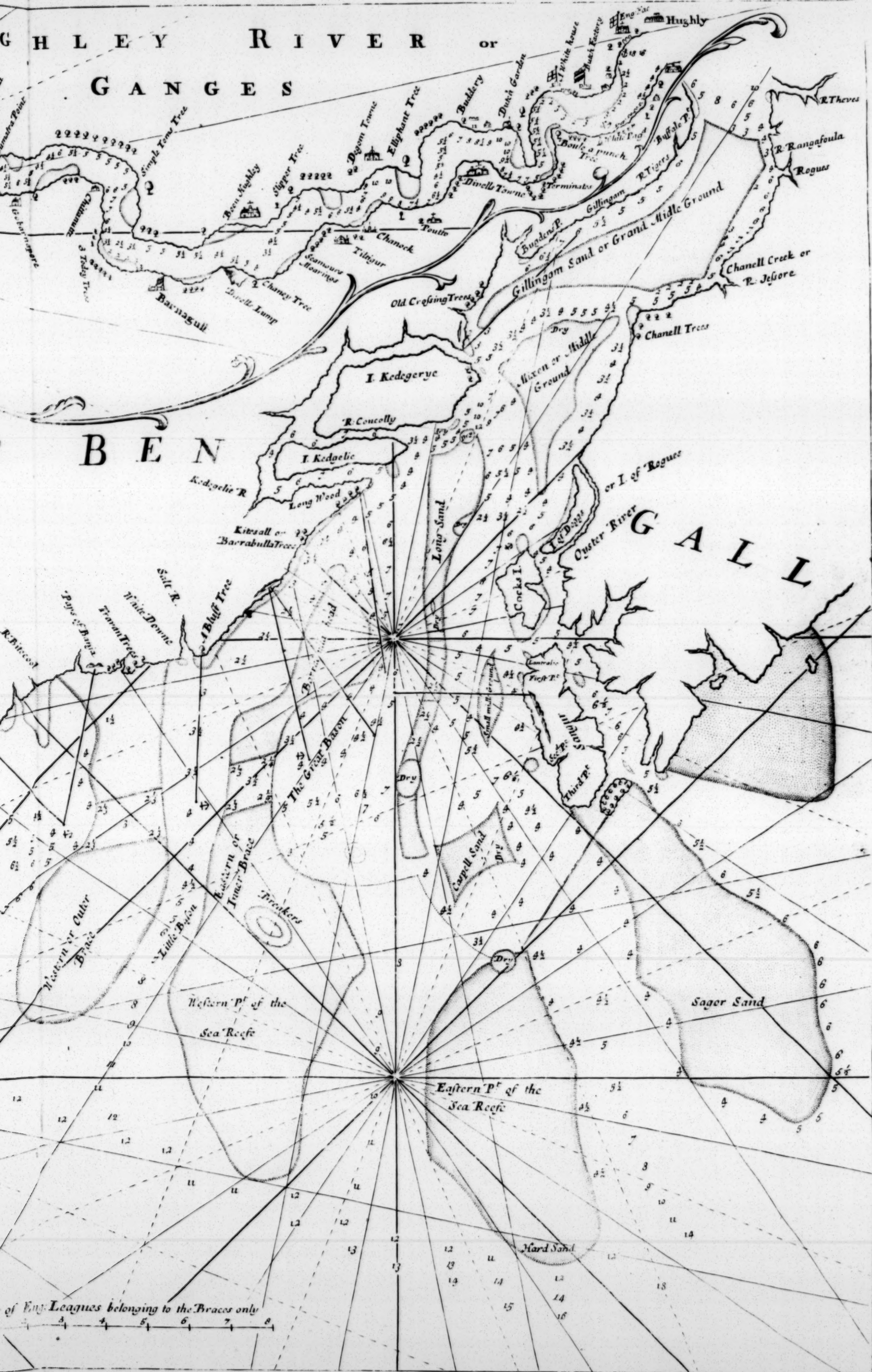
I know it is a very difficult thing to persuade Men to any new Undertaking; and as often as I have proposed this, as the safest way for *European* Ships of the greatest Burthen to be carry'd into the River *Hughley*, I have met hitherto with no other Objections from those of my Fraternity, than, That as it was a thing that had never been done, that the Entrance into the Deep lay too far from the sight of the Land, and that it would be difficult to have any Buoys placed on the outer Heads of the Sands to guide them into it. Though without Reflection, I am apt to think the main Reason, (which yet they are loath to own) is their unwillingness to leave sight of the Land, and the want of a thorough

Map Room Cat

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GHLEY RIVER or GANGES



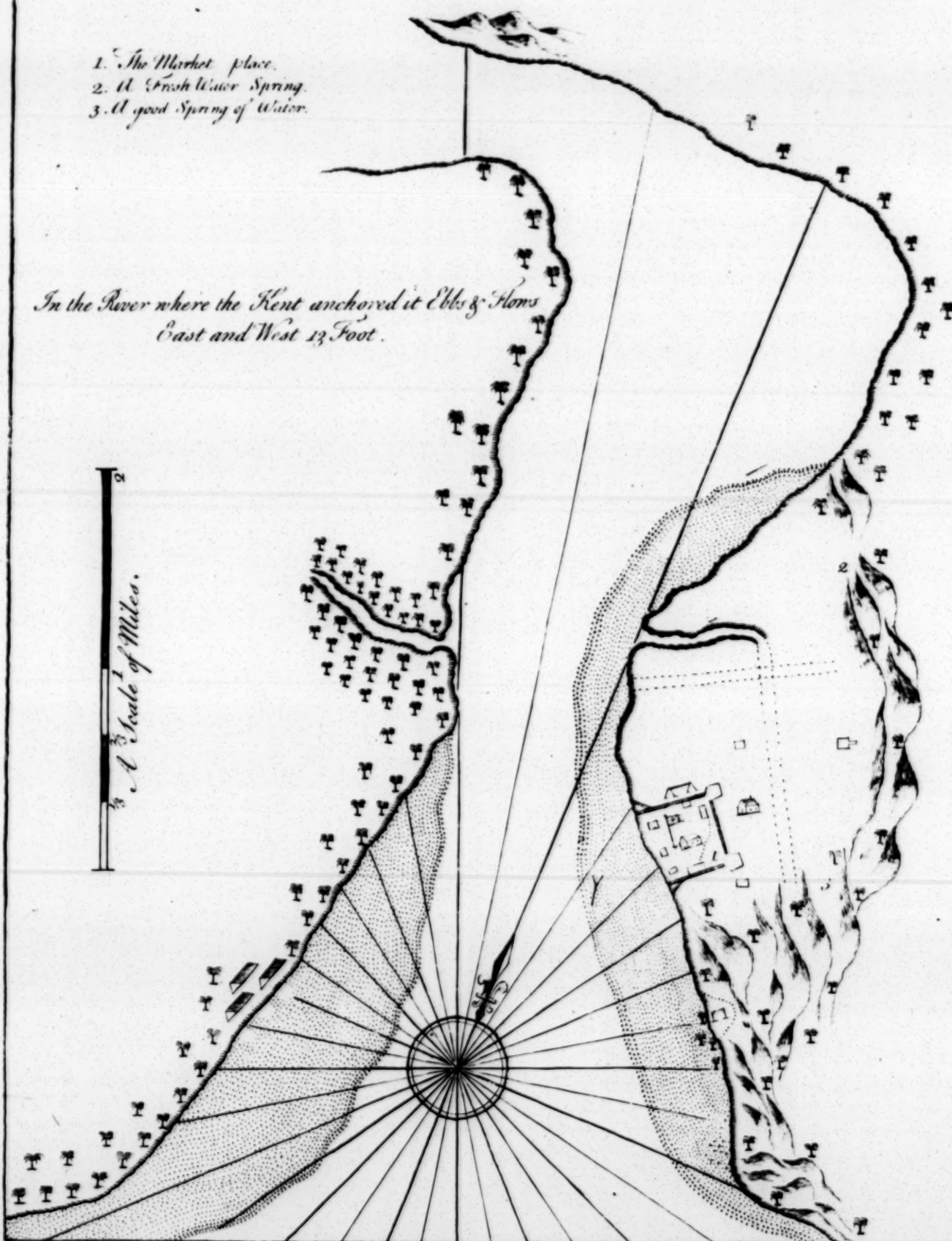
*A Map of the
River English in the
BAY of DELAGOA*

*Sold by W. & J. Mount & T. Page
on Tower Hill LONDON.*

1. The Market place.
2. A Fresh Water Spring.
3. A good Spring of Water.

*In the River where the Kent anchored it Elks & Hens
East and West 12 Foot.*

A Scale of Miles.



TH

*Bangwaloong
by
Cootann Majasas
Who wore Artificial Horns
made of Whalebone*

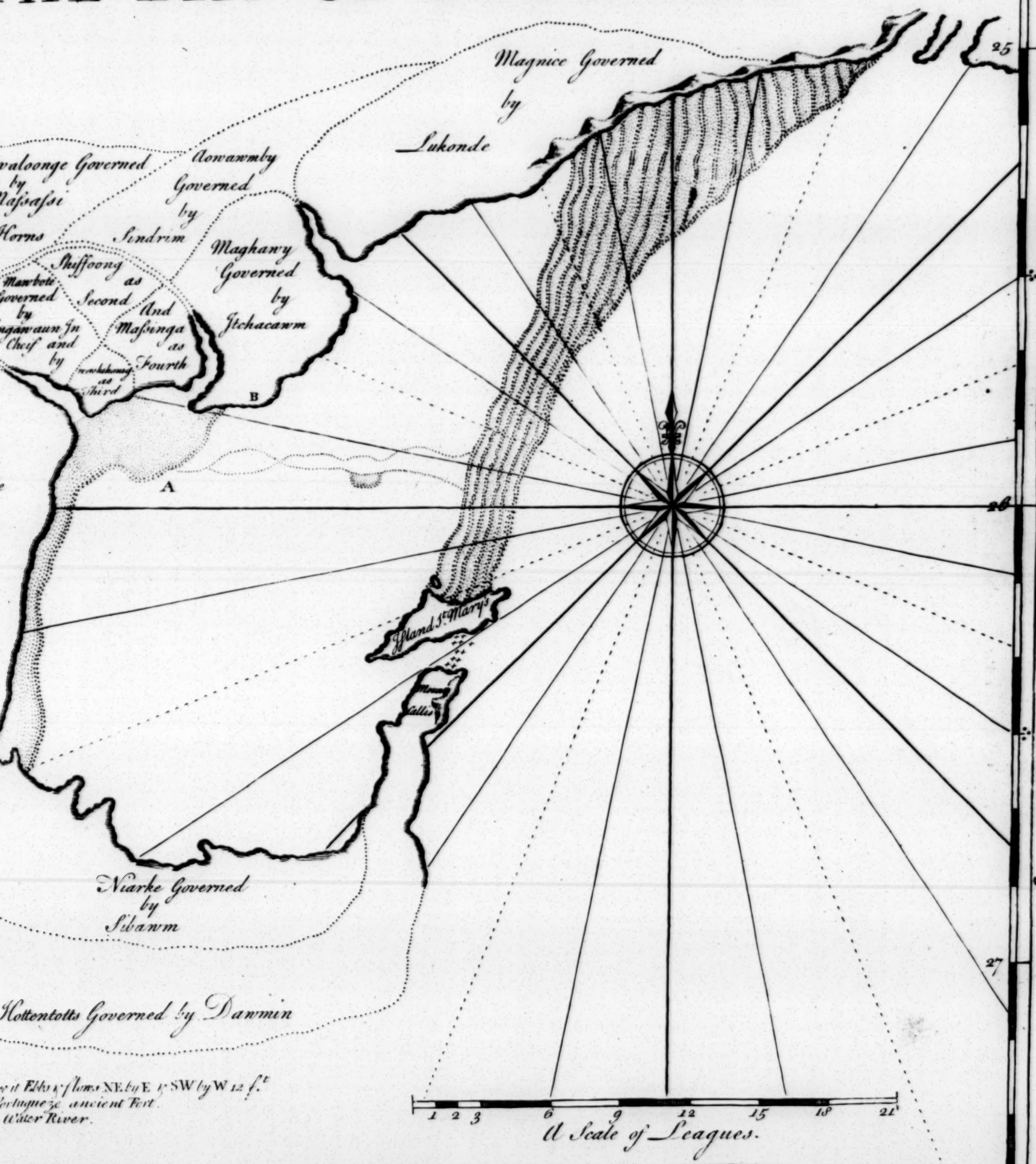
*Manboie
Governed
by
Sungawann
Chief*

*Seimbe
by
Mongovy*

Hottentots

- A. Where it Elks
- B. The Portuguese
- C. Fresh Water River

THE BAY OF DELAGOA



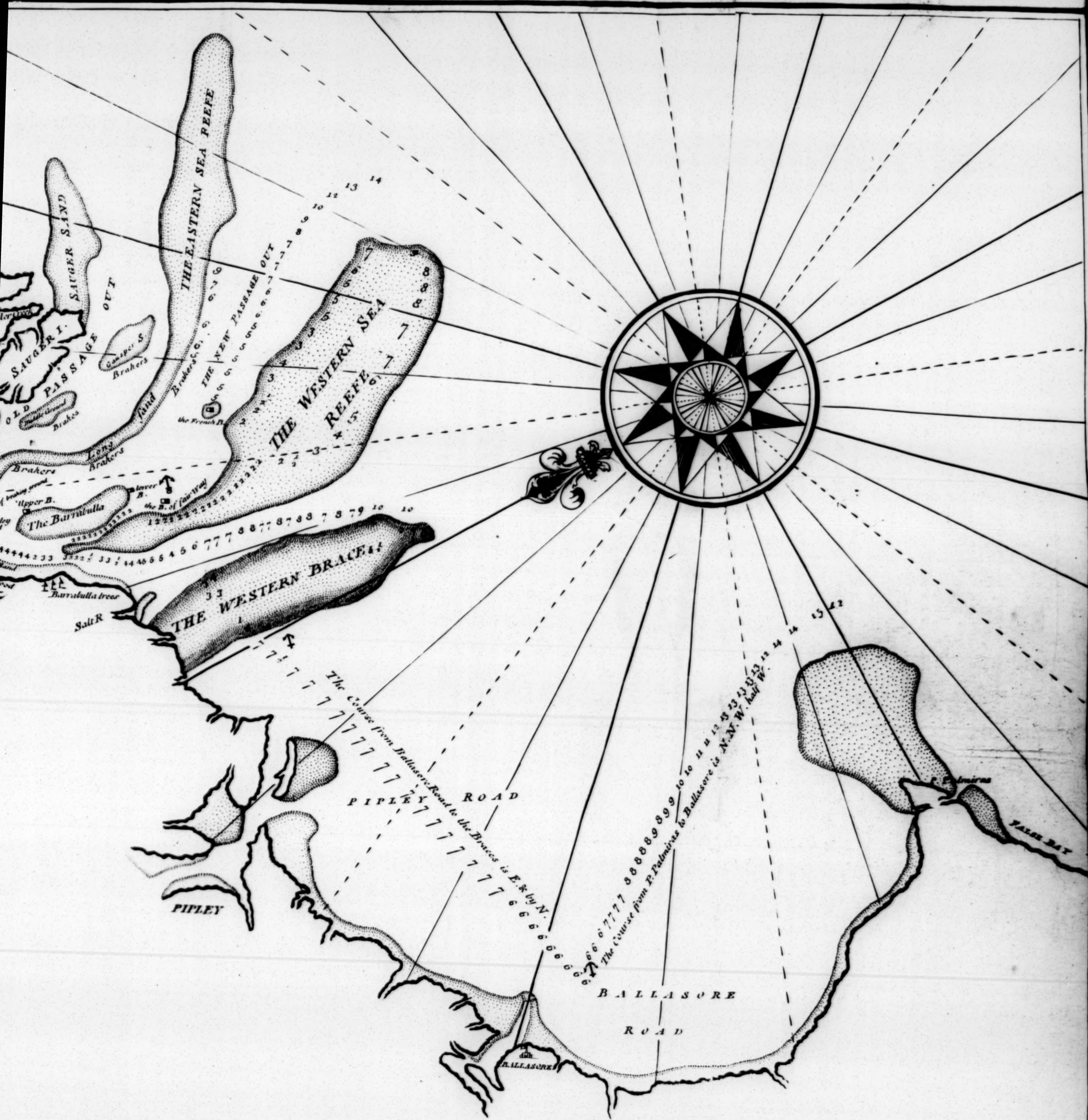
THE



By { *The Greg. Warren Surv^r*
 William Wood Pilot.

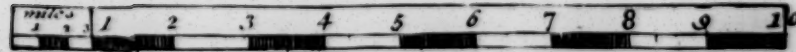
O F

B E N



GALL

A Scale of ten Leagues



Sold by W. Mount & T. Page on great Tower Hill LONDON.

thorough Acquaintance with the true Position and Shoalings of the outer Sands; for otherwise, having two Shallops to wait on a Ship, I cannot see any Necessity of Buoys, or Difficulty, much less of Danger, in carrying of Ships that way. The Manner I propose is thus;

First, Let the Ship and Shallop keep Company to *Piply* Road, I mean two Leagues and a half to the Eastward of it, as in the former Directions was given for Ships that were to have gone over the Brace; and there the Ship coming to an Anchor, dispatch the two Shallops with Orders to steer East South East half South, until they get the Soundings of the W. side the Brace, and so let one of them keep along the W. side of it until he get to the Southernmost-end of it, and the other at the same time keep abreast of his Companion in eight Fathom, soft Ground, and so let them both Anchor, the one upon the very South Pitch of the Brace, in four and a half or five Fath. sandy Ground, and the other East and West from you, in eight or nine Fathom oozy, and there both stay till the Ship come to them.

Secondly, The next Day Morning, whether Ebb or Flood, the Ship may weigh and steer to find out the Shallops, with the Ebb East South East, and with the Flood South East by East, but so as never to come in less than eight Fathom at low Water.

Thirdly, Before the Ship reaches the outermost Shallop, the innermost, which was at an Anchor at the South-end of the Brace, ought to make all possible haste to get the Soundings of the Westernmost part of the South-end of the Sea-Reef; and stand along the End of it, in 5 and a half and 6 Fathom, until he find he is past the Branch of it, and got into soft Ground, let him then tack and stand back into hard Ground, and there Anchor in 6 Fathom; whilst this is doing, the other Shallop may keep a Mile or two ahead of the Ship, in soft Ground, 10 Fathom, and when they are abreast of the Shallop, that rides upon the head of the Western-part of the Sea-Reef, let the Ship Anchor, and dispatch away the Shallop to her Companion.

Fourthly, When the two Shallops are join'd, and Day-light presents, let them both weigh, and according to the Tide underfoot, stand thwart the Swatch, the innermost keeping in 7 Fathom, and the outermost 9, until the innermost find hard Ground upon the Edge of the Eastern-part of the Sea-Reef, and endeavour to round the South-end of it, without coming into soft Ground, whilst the outermost Shallop keeps in about 10 Fathom, but no less, until the innermost makes a Signal that he has rounded the South-end of that Sand, and finding soft Ground tacks again to come to an Anchor upon the Sand; which when he has done, the outermost may come to an Anchor in 11 Fathom North and South from him.

Fifthly, These Shallops being thus posted, will have the Entrance into the new Depths sufficiently open, so that the Ship has nothing to do but to stand up to the outermost of them, and then stand into the Northward, she that was upon the Head of the Sand, always keeping upon her Larboard-bow, along the Edge of the same Sand, in no less than 4 Fath. Water, be it what time of the Tide it will, and the other Shallop upon his Starboard-bow at such a Distance, that she may from time to time make signs to the Ship what Depth of Water she has, with order to make some particular Signal if she should meet with any sandy Ground upon the Edge of the *Sagor* Sand.

Sixthly, The Entrance in this Channel, called the *New Deep* (which is bounded on the West-side by the Eastern Part of the Sea-Reef, and on the East-side by the *Sagor* Sand) lies 12 Leagues from the Island *Sagor*, the Channel stretches nearest N. and S. having 12 Fathom Water at the Entrance into it; it is 6 Leagues over from Sand to Sand, so you may expect to be in 5 Fathom at Low-water soft Clay, before you can pretend to see the Island from the Foreyard in fair Weather, and until you come into 4 and a quarter at Low-water you will be hardly able to see it on the Deck; but let not this startle you, for the Channel thereabouts is three Leagues and a half broad, soft Ground; but though you must expect no more, yet you will find no less betwixt that and *Sagor*, provided always, that you leave the Southernmost End of the Island a League upon your Starboard-side; and when the said Point bears East from you at the said Distance, let one of the Shallops keep between the Ship and the Sea, and *Caspil*, having Long-land to the Westward Offing, and the other upon the Sea-board, between you and the small middle Ground, until you get up as high as *Cock's* Island, and there, if Night come on, or the Flood be almost spent, anchor till the next Day, abreast with the Body of the Island in 7 and 8 Fathom.

Seventhly, When the next Day's Flood presents, from the Body of *Cock's*, at the first Quarter's Flood, steer North, or North half West, keeping the Long-land abroad until you get over within a Mile of the other Shore, and about half a Mile short of the lower Point of *Kidgaree* River, and thence proceed as has been already directed in the Instructions given for great Vessels that had come through the middle Channel.

And if *European* Ships of great Burthen might be attended with a couple of Shallops, I dare be bold to affirm, that there is abundantly less Danger in entering the River through the *New Depths* than over the *Braces*; nor need they fear ever coming into less than four Fathom at Low-water, upon Spring-Tides, if the Night, or want of Wind should occasion their Anchoring when they come a little short of the *Sagor*, or between the small middle-Ground and the Long-Sand, which cannot be said of either of the other Entrances into the River.

Directions to go up along the Western Shore.

Being come up as high as *Gillingham*, mind to give the upper Point of the River a Birth, for the *Gillingham* Sand lies off from above the said Point of the River half a Mile to the Eastward, and there is but a very narrow Channel between it and the middle Ground; which Channel is not to be entered but with three quarters Flood, with a Vessel of Charge. It lies about three quarters of a Mile Offing from the Main, and a certain round bushy top Tree a quarter of a Mile to the Northwards bears WNW. and then the nearer the Shore the better the Channel, until past the River of *Tygers*. You may begin to edge over towards the River of *Rogues*, above the Head of the grand middle Ground; and when *Buffalo* Point bears from you half or three quarters of a Mile, steer directly over for the East-shore, East North East, and that will carry you in five, six and seven Fathom clay Ground, until you come under the Shore; which, to prevent the Danger of the Point of the *Diamond*, you must keep fair aboard until past the small Creek. This Channel is not broad enough for a Ship to turn it up.

From
Kidgaree
to Buffa-
loes.

In the En-
trance at
half
Flood, 3
and less,
hard
Ground
in the
Channel
4 and 5
Fathoms,
soft
Ground.

Mr. Herring, the Pilot's Directions, for bringing of Ships down the River of Hughley.

FROM *Gull Gat*, all along the *Hughley* Shore, until below the *New Chaney*, almost as far as the *Dutch Bungelo*, lies a Sand which stretches one half or more of the River over, and therefore the Larboard-shore must be kept aboard, which affords three and a half and four Fathom, until past the next Point, below the usual Mooring of the *Dutch* Ships, and afterwards four and a half and five Fathom, keeping very near the Shore until you come a little short of the Point, opposite to the *Dutch Bungelo*. Past the *New Chaney*, below the House, short of the *Dutch*

Bungelo, on the *Bunger* side, lies a shoal discontinued from the Buoy-land by a small intervening Channel of four feet Water. This Shoal is steep, and reaches within a small Stone's throw of the *Bungelo*. Now the Point aforementioned, on the East-shore, opposite to the *Bungelo*, being flat off, so that from a little short of the said Point you must put over to the Western-shore; but you must do it so that you fall not below the *Bungelo*, by reason of the aforesaid steep shoal, which reaches (as I have said) so near it, or rather half a Stone's throw below the *Bungelo*, and

L. then

then there will be no Danger; for from *Bungelo* itself is a Channel deep enough, viz. five, six and seven Fathom, according to the time of the Tide, so that from thence you must keep it aboard until you come near the upper Point of the *Devil's Reach*.

Bowl of
Punch
Reach.

Not only the Point of *Bowl of Punch* Trees shoal off, but also in the Bite next below it there is shoal Water.

Devil's
Reach.

This Reach, besides its Crookedness, hath on the Starboard-shore, its shape of a Shoal and Eddy; this Shoal lies from the upper Point two thirds or more of the River over, so that from a little above the upper Point you must stand over with a great Tree on the Larboard-side, being the lowermost of all the Garden, wherein this great Tree stands, next the upper end of the plain Ground, on the Eastern-shore, which said Shore is to be kept from thence fair aboard to the lower Point of the Reach.

Pulta
Reach.

From the lower Point of *Devil's Reach* you must keep Mid-channel, or nearest the Starboard-shore, for the Larboard is Shoal until you come into the beginning of *Pulta* or *Poutto Reach*, and there abreast with a single great Tree, you must Edge over to the East-shore below *Pulta*.

Degon.

From the Western-shore in *Pulta Reach*, from the Back of the Point, is all Shoal more than half the River over, as far down as the *Elephant Tree* at the upper end of *Degon Town*.

The Point of *Degon* hath deep Water, and is never free from an Eddy, and the opposite Point is shoal off, so that the Mid-Channel ought to be kept until quite below the Town, and then the Starboard-shore until you draw near *Chanock*.

Chanock
Reach.

Chanock Reach hath two Shoals, the Upper on *Chanock*, and the Lower on the opposite side; to avoid them both you ought to observe these following Directions; from the Upper Shoal, which reaches from half a Mile above, to one fourth of a Mile below *Chanock*, you must, from below *Degon*, as aforesaid, keep the Starboard-shore aboard, until you come up with a Lime Tree, on the lower end of the clear Land; or if the Tree be not standing, you must keep, as I said, along until you come very near the lower end of the said plain Ground, and then steer over with *Chanock Trees* and House, between the two Shoals, until you come Mid-river, but no nearer to the House, from thence to keep still between them, and go clear off that lower Shoal you must edge over by degrees for *Chanock* shore; I say right with two bluff Trees, near to which, between them and the Water-side, stands two *Palmera Trees*, and under them a small House; these Trees and House bears East and West with a Pagoda on the Western-shore, the Top whereof may be seen over the Grove; and the said Shoal, which begins at the End of the clear Land aforesaid, the broadest part of it stretches off the said Pagoda, East one fourth, or more, the River over.

Titigor
Reach.

From the said Trees and House the Larboard-shore is to be kept close aboard down *Titigor* or *Tiltigur Reach*, (*Titigor* is a small Village at the upper End of that Reach) next below the *Chanock* on the same side.

From the lower End of the clear Ground you may keep Mid-channel in *Titigor Reach*, along down to the *Slipper Tree*, and then from an old small Brick Pagoda, which stands upon the Point amongst a parcel of Trees, opposite to *Slipper Tree*, you must begin to edge off to the Starboard-shore, with a great Tree over against *Puddres Town*; and then again, from just over against *Puddres Town* you must keep the Starboard-shore nearest aboard until you come near the Point on the said Starboard-side, at the lower End of *Slipper Reach*. From the Point on the Starboard-side, at the lower End of *Slipper Reach*, you must edge over to the Eastern-shore, or Larboard again, with two great Trees, and then rounding the Bite (for the Starboard-shore is this Reach, shoal more than one fourth of the River over) until you come over to the *Brashmans's* or *Devil's Lump*, and there, in Pistol-shot Offing from the Shore, you will find deeper Water; so that you may continue rounding the Bite until you come within less than one 4th of a Mile short of the upper Point of *Barnagull Reach*.

Brash-
man's
Reach.

Barnagull
Reach.

Barnagull Reach is on the *Barnagull-side* all along flat, therefore from a little above the upper Point, on the Larboard-side, you must put right over for the Starboard-

shore, and keep it fair aboard, until almost one third of a Mile below the White House of *Barnagur* or *Barnagull*.

Being about one third of a Mile, or hardly so much below *Barnagur House*, on the opposite side, you must stand over again (if with great Ships let it be with the High-water Flood, or an Hour before High-water, towards the *Salt Banks* on the Larboard-side) and then keep rounding *Chitty Poe* Bite down to *Chitty Nutty Point*, only minding and keeping out of the Eddy short of the Point, because the Starboard-shore is all shoal in *Chitty Poe Reach* more than two thirds of the River over.

Chitty
Nutty
Reach.

From the Pitch of *Chitty Nutty Point*, a little before you come to the great Tree at *Chitty Nutty Town*, to keep clear of the Sand which lies on that side along Shore, below the said great Tree, and reaches a quarter of a Mile below the Town, you must endeavour to keep over in Mid-channel at least, or nearest the Starboard-shore, until you come near the next Point on the Larboard-side.

Chitty
Nutty
Reach.

From the next Point on the Starboard-side below *Chitty Nutty* you must endeavour to get over to the Larboard-side again, and afterwards to keep the said Larboard-side aboard down to *Gover Napore*; for the Starboard, or N. W. Shore, hath a Shoal which reaches down to the said Point, until a little below *Gover Napore Town*, and it is steep and not to be borrowed upon with the Ebb nearer than four Fathom.

Gover
Napore
Reach.

The Bite below *Gover Napore* is shoal, and below the Shoal is an Eddy; therefore from *Gover Napore* you must stand over to the Starboard-shore, and keep it aboard till you come almost up with the Point opposite to *Kiddery Pore*, but no longer; for below the Point is a great Sand which lies two thirds or more of the River over, so that when you are a little short of that Point, you ought to stand directly over to *Kiddery Pore* Flag-staff, afterwards keep rounding the Bight below the Town, only take care to avoid the Eddies.

Kiddery
Pore
Reach.

In the Entrance of great *Tanna Reach* there runs two Eddies, one from the Point on the Starboard-shore, the other from the Point, or lower side of *Kiddery Pore* aforesaid, which almost spreads the whole River; but both in the Entrance, and along the Reach, the Larboard-shore must be kept aboard, there being in the Reach itself no Shoals, or any other Danger, except the Eddy, especially that in the Bight between the Fort, for if you are not mindful to keep the Larboard-shore aboard, but will think the Mid-river enough, the Ebb will be apt to horse you on there, for there will be no carrying out an Anchor in the Tide until the next High-water. On the Larboard-side, in *Little Tanna Reach*, from behind the lower Point of *Great Tanna Reach* lies a Shoal, to avoid which, from the South Point, you must stand directly over to the *Little Tanna Reach*, and keep it close aboard till you come to the lower Point of the said Reach: This Shoal will be found to stretch furthest over the River towards a small Creek below *Little Tanna*; when a single great Tree, on the Western-shore, is open a Stern of you, about a Handspikes Length off the aforesaid Tower of *Great Tanna Reach*; which Tree, if you were coming up with the Flood about *Little Tanna Point*, will be a Mark for you not to adventure any further towards the Eastern-shore, off from the Point; than whilst you can see the Sand off the aforesaid lower Point of *Great Tanna Reach*, because if the Shoal shut in the Tree with the Point, the Flood will horse you too fast upon the Sand, that you will not be able to fetch *Little Tanna* again time enough; which Shore indeed ought, coming up, to be kept close aboard from the very Pitch of the Point.

Little
Tanna
Reach.

In this Reach, on the Back-side of *Little Tanna Town* Point, a little below the small Village called *Mornock Pore* or *Mannek Pore* on the Starboard-shore lies a Shoal, at least two thirds of the River over, which Sand is not upon any Terms to be adventured upon with the Ebb nearer than 5 Fathom. And also in the Bite, opposite to the Point, runs an Eddy; to avoid both, Care must be taken in doubling this Point. This Reach is free from Danger, except Eddies close under the Bushes: Here you keep Mid-Channel.

Crown
Reach.

Nutty Bungelo or *Ned's Bangalla River*, lies in this Reach on the Larboard-side; the Mouth of it is flat about a Stones throw, and also the small Bite below the lower Point of the River; you must edge over towards the Starboard side. The upper Point of this Reach on the Starboard-side going down, is flat about a Stones thrown from the

William
and John
Reach.

the Shore. The Starboard Shore in this Reach, from the backside of the upper Point, until half way through the Reach, shoals half way the River.

John Padroe, or *Pedro Reach*, takes Names from a small but dangerous Island lying in the fair way of the River. You must take care to keep clear of the Point. You may pass on either side, but to leave on the Starboard side, is the Practice of most of our Pilots; but I think it not convenient going that way with the Ebb, because on the Larboard side the Main, from the upper Point next above the Island, to the lower End of the Reach, is all along flat a good way off, so that the Channel is narrow, and it lies close aboard the Island, affording but three and a quarter, and four Fathom Water. Upon Experience both ways, in Choice and Practice, it hath been, and always shall be, with a Ship of Burthen, going down with the Ebb, to leave the Island on the Larboard side; and if you would do the same, in order thereto, so soon as you have fair sight of the Island and find your self below the forementioned shoal in *Sumatra Reach*, you must stand over towards the Starboard Shore; and to prevent being hors'd by the Tide of *John Pedroe River*, upon the Point of the Island, you must keep clear on board the upper Point of the said River, so near that you may leap on Shore from the Yard-Arm upon the Point, and as you come open of the River, endeavour to check the Tide what you can, until you find your self shot below the Point of the Land; if you are not in extraordinary great haste of your Way, it would not be amiss to wait the Opportunity of a slack Water to pass this Island, and for that reason to Anchor about half a Mile above this Island under the Starboard shore, that so you may be failing half an Hour before High-water. When you are past the Island the Starboard shore must be still kept on board down to *Rangamata Point*.

Rangamata Reach.

The upper side of *Rangamata Point* is bold, but below the *Chocky* lies a Shoal, where at Low-water is but little Water; therefore from the Point you must steer over for the Eastern Shore, just before the River's Mouth of *Kulkully* or *Calcuta*, and then all along that Shore, whilst in *Rangamata Reach* you'll find 9, 8, 7, and 6 Fathom. From the lower End of *Rangamata Reach*, you must steer over for the Starboard Shore, directly with two Trees, which stand near together, because the Larboard Shore in this Reach, from behind the Point, is shoal more than two thirds of the River over; and when the said two Trees are shut in with each other, you will be up with the broadest Pitch of it; but the best Tide runs on the Starboard-side.

Hogreaver Reach, or Porcus.

This Reach, which was formerly the Rendezvous of the Dutch Ships (who had their Pork from that small River on the Larboard side, and thence gave it the Name of *Porkens Sprent*) is bold enough from side to side, except just over the River's Mouth, and in the Bight opposite to the Point of *Raspluise Reach*.

Raspluise Reach.

In this Reach, above the Point of *Raspluise River*, by the Country People, call'd *Mundegate* or *Mundelgate*, is to be known, before the River comes open, by a great spreading Tree, which stands on it, it shoals half a Mile above the Point; but there is room enough in the Mid-channel, affording 15 Fathom Water. The River's Mouth hath on the Starboard side a shoal, to keep clear of which, failing down, you may observe these Cautions.

River's Mouth Reach.

From *Raspluise River* you must keep *Raspluise Shore* on board, until you come up with a small plain spot, near which stands a round bushy Tree, higher than the rest and makes (before you come out) like a Point of a Creek; from that Tree and plain spot, you must stand over to the South East Shore, and keep that aboard down almost to *Hughley River Point*, and reach almost as low as the Mouth, short of *Tumberly*, *Cockly*, or *Tomberlick*.

When you draw near the Point take great care, not coming nearer than 7 or 6 Fathom upon any terms whatsoever; you must stand over to the South Shore, towards the Place of the Dutch Rendezvous, for otherwise the Ebb of both Rivers will certainly horse you down upon the Shoal behind the Point.

The Narrows.

The *Narrows* lie along nearest E. by S. and W. by N. They are not every where alike deep from side to side, but yet where there is shoal Water, viz. behind the forementioned Point of *Hughley River*, in the Bite of the second

Reach, on the Larboard and on the Starboard-side, about a Mile and half short of the lower Part of the *Narrows*; the Flood runs so forcibly, as well as the Ebb, that it would be more prudent to lose an Hour or two of a Tide, whether going up or down, rather than run the Hazard of Anchoring in such a Place; and furthermore, if that the Wind will suffer, the best going down is in the Mid-channel, or nearest the Starboard Shore, because on the Larboard runs two or three Eddies upon Ebb, which it will be hard for you to get out of.

When you are in the middle of the Mouth of the *Narrows*, a single Tree on the Western Shore, which is the Mark of the *Diamond Sand*, will bear South by West.

This *Sand* stretches from the Western Shore, below the *Narrows*, East South East, the Eastern Point thereof lying about a Musquet shot short of a small Creek on the Eastern Shore, directly opposite to the fore said Tree; the Tree and Creek bearing East and West from each other.

It is a Sand by no means to be borrowed on by great Ships going down with the Ebb; and therefore, to keep clear of it, take the following Directions.

From the lower Point of the *Narrows*, on the Starboard side, remarkable by a great spreading Tree, stand over directly for the Eastern Shore, steering from thence E. by S. or ESE. not more Southerly than so as to get over with a parcel of Bushes higher than any of the rest. The Eastern Shore is to be kept close aboard, until past the said Creek, afterwards allowing only a small Birth for the Point off of the River of *Rogues*, commonly call'd by the Country People *Adegom*, if the Wind will permit, to the Channel Trees; however, being once past the said Creek, there will be more room to run it up between the Eastern Shore and *Buffalo Point*, keeping the Lead.

Going down with the Ebb as aforesaid, it is not safe to come too near it, until you draw near the aforesaid Creek, but then you may adventure to stand upon it in 3 Fathom; or so long as the two Points of the *Narrows* are kept open of each other, but no farther.

Towards the Western Shore is to shut in the said Point, especially of the single Tree afore-mention'd on the Western Shore, bearing away more Southerly than W. by S. the reason is, the Ebbs set wholly upon it, insomuch that I have known a Sloop turning down, which although she put a stay in eight Fathom Water, nearest the Starboard Shore, at the Mouth of the *Narrows*, just below the great Tree, meeting with an unexpected Calm, notwithstanding all possible Endeavours to have towed her over to the Eastern Shore, hath, by the Force of the Tide been horsed over the Sand, in nine and ten Foot Water, a quarter Ebb.

A little short of the River of *Rogues* lies from the Shore a mud Bank, which requires a little more Offing; at the upper End of the Bank stands at the Water's edge a single round Bush all in the Sand.

From the River *Rogues* the Starboard Shore, with a great Ship, ought to be kept close aboard all along down to the Channel Trees, for in the Offing lies the grand middle Ground, and you must remember, that about a Quarter of a Mile from the Shore, directly over against the River *Rangamata*, in the Bight, when *Buffalo's Point* bears N. by W. three quarters W. lies a shoal, which extends about a Mile in length, and half a Mile in breadth; therefore you must take care to keep between it and the Main in 5 and 6 Fathom aboard the Shore, tho' small Vessels may, and commonly do, go without it all along the Edge of that side of the grand middle Ground, until they come to the Channel Trees.

When you come at the Channel Trees, and have brought them S. by E. or SSE. from you, a little below the Creek; about a Cable's length from the Shore, there let go your Anchor, and wait for the next High-water to go over with, if your Ship be of a considerable Burthen; from thence, at High-water, weigh, and keep in the best of the Channel, between the Head of the *Mixen*, or *Mixen* sand, and the lower side of the grand middle Ground, with a leading Gale of Wind steer over W. and W. by N. so as to keep the said Channel E. from you, a stern of you, as near as you

Diamond Sand.

Directions for great Ships to keep clear of it.

Directions for small Vessels to turn clear.

Adegom, or the River of Rogues.

Rangamata Shoal.

Channel Trees.

If you must turn it over to the Trees on

on this bearing between the two Points, you must mind to keep them and not lose the Lead.

Directions to go to the inner Channel.

From below Kedgery to the Edge of the Brace.

Cockoly Shoal.

Engely Sand.

Salt River

Edge of the brace.

Description of the Western Brace.

you can, but no more Southerly than East and by South, to avoid being hors'd down too low upon the Mixen; so shall you certainly go in the best of the Channel; and in the first of the Ebb you will hardly find less than four Fathom, and when you come half way over, steer so that you may fall in with the Western Shore about three Quarters of a Mile below the River of Gillingham; being over, you will come into 5 and 6 Fathom stiff Ground, and then you may keep along the Shore in about half a Mile Offing, not only to avoid the small Ridge, which, as aforesaid, lies about a Mile and a half below Gillingham, and about a Quarter of a Mile from the Shore, but also to give the upper Point of Kedgery River a convenient Birth. When you are open of the said River keep still along the Shore, not exceeding half a Mile Offing, to prevent being hors'd into a deep Water short of the Head of the Long Sand, until you come a little below the False Point of Kedgery and then being clear of the outset of the Tide, you must come to an Anchor, if you design down the inner-Channel, to wait the next Opportunity of a High-water, but let it be by Day-light.

To pass the Shoal of Cockoly, with a High-water, and a leading Gale of Wind, though the Ebb make strong down, weigh, and keeping as I directed in coming up, about a Saker Shot from the Shore; so soon as you have brought a bushy Tree, which is higher than all the rest, and stands near about mid-way between the False Point of Kedgery, and the upper Point of Cockoly River, to bear NW. a little Westerly, you will begin to find uneven Soundings, which will last you until you have brought the said Tree N. by W. from you, and the ragged Tree on the NW. side of Cockoly to bear NW. somewhat Northerly from you; but you must not be startled, for in the above-said Offing the least Water that you shall find, being so early of the Tide, will be 4 or 3 Fathom and a half, keeping about a Mile from the Shore, remembering what I have said concerning Engely Sand, viz. That it begins at the white broken Cliffs below Cockoly, and reaches unto three Quarters of the River's Mouth lying thwart in, as you draw nigh the upper Point, about half a Mile from the Shore.

When you are past Engely be sure you exceed not one Mile and a half Offing from the Shore, or at the very most 2 Miles, and then you shall be in no danger of the Barrabullo Head, which lies near S. 4 Miles from the long Grove, and you cannot well recover yourself quite below it, until you have brought the Kettisaul Trees NNW. from you, but then I would not advise you to keep any further than 1 Mile and a half Offing from the Shore, in a about 3 and 3 Fathom and a half soft Ground, because of the West part of the inner Brace, which, from the Barrabullo Head runs to the Sea-reef, bounding the Swatch to the N. and W. on the sides next to the Main, uneven foul Ground. When you are come almost as low down as the Salt River you must edge further off from the Shore, because off the River lies a Ridge of hard Ground, but when you find yourself in the Swatch, short of the Edge of the Brace, which will be when the Salt River Tree bears NNW. or N. by W. about four Miles from the Shore, in soft Ground, three or three Fathom and half at Low-water, let go your Anchor and stay for next Ebb to go over the Brace: To go over it at High-water weigh and steer W. and by S. and WSW. not more Southerly, because the first of the Ebb sets wholly off the Shore, so shall you go thence in no less than 3 Fathom, and when you are over you'll be no less than four Leagues from the Shore, from thence you may shape your Course either from Ballsore Road, or sail out of the Bay directly, according to your Occasion.

And here Note,

First, That the longest Extent of the Western Brace is from the West Point of the Salt River about eight Leagues and a half, and they lie thence South and by West.

Secondly, WSW. is the broadest Part of the Brace Seaward, which is about three Leagues and a Quarter.

Thirdly, That the nearest the Shore the shoaler the Water, call a Bowling Ground.

Fourthly, That off the Shore, or the S. and by W. part of the Sand is not so hard as the usual Tract, the very utmost pitch of it is dry at low Water.

To go from Kedgery to Cocks with a leading Gale of Wind, in the first of an Ebb (between the Mixen or Mixen and the Long Sand) the best Course from the upper Point of the River will be South and by East, borrowing upon the Mixen-sand in 4 and 4 Fathom and a half, because that will be a Weather-sand; but if you have a Southerly or SSW. Wind, and must turn it over, according to the Draught of your Ship, I would not advise you at any Time to venture in less than three Fathom and a half, and the Long Sand, when you stand to the Westward, must not be ventured nearer than five Fathom and a half, because this side is steep, and the Tide sets strongly upon it, and not only so but when Engely beareth NW. and standing towards it, you may have 6 Fathom, and the next throw be aground.

When you come down to Cocks, if you resolve for the middle Channel, and have a Southerly Wind, you must Anchor in 5 Fathom short of the Point, and there you will have only the Eastern Channel, for the Point of the Mixen or Mixen will break off the force of the Ebb of the Main Channel; but if you have a Sea-Gale of Wind, and the Tide enough under foot, you may proceed from Cocks when the Body of it bears ESE. to edge by degrees towards the Long Sand, and keep along the edge of it, steering WSW. and SW. by W. or sometimes SW. or SW. and by S. edging off and on as you find Occasion, so you keep in five, four and a half, and four Fathom soft Ground, until you have fairly open'd the Point of Sagor, and brought the three Hommocks, which stand a little to the Southward of the said Point to bear East or East a little southerly, and there Anchor in the aforesaid Depths; or at least that you have three Fathom soft Ground at Low-water, that you may wait an Opportunity for the next High water to put over with, but let it be by Day-light.

Note, It's no discretion to go this way but when you have a settled gale of Northerly Wind, for if you be taken too short upon the West Brace, you must, if your Ship be of a great Draught of Water, of Necessity come back into the Swatch again, which when the Wind is unsettled is very Hazardous.

If the Wind be fair, and likely to hold, at High-water weigh, and well minding to keep the three Hommocks, at their aforesaid Bearing, steering over the Long Sand, W. or W. by N. as you find the Tide to horse you, and so you shall have 3 and a half or 3 Fathom upon it; but so soon as you find your self well over, and have had 3 or 4 Casts of soft ground, steer away W. or W. half S. thro' the Swatch; and if you find that Course to carry you into 5 or 6 Fathom Clay, it is well; but if you find the shoaling of the Tail of the Barrabullo too soon, edge off a little Southerly; but if you should find six and a half or seven Fathom soft ground, conclude you are too near the long Sand, and therefore keep a little more Northerly, that you may enter the East Brace in the fair way; and when you draw near it, which you will find by the gradual Shoalings, and the ground beginning to harden; if you think you have not Wind and Tide enough to carry you over both Braces, Anchor before you come upon it. But if you have a mind to sail forward, continue your Course West, and West half North, but by no means any thing Southerly; and if you are any thing early of the Tide, it will carry you over the Eastern Brace, and over the small swatch, in which you will have perhaps but three or four Fathom, soft Ground, and over the Western Brace three Fathom.

Note, This Eastern Brace in the fair way is not above 3 Miles over, the Swatch between it and the Westermost, about the same breadth. When you find your self enter'd upon the Western Brace, you may steer away W. by S. and that will bring you over in about four Leagues Offing from the Shore.

Directions for going through the New Deep.

This is the best Outlet for Ships belonging to the River, and if you have a design to go out this way, you must in this place, take special care to keep and bring the NW. point of Cocks NE. and by N. from you, and the Westermost point of Sagor SE. by S. to prevent falling in upon the middle ground, which lies due SW. from the Point of Cocks 5 Miles distant, and when you have gotten these bearings, viz. the NW. Point of Cocks NE. and by N.

M. & Room Cat.

31



RAGIA-WERRA-COAST

THE RIVER

OF THE

To the Hon^{ble} the Governor
Deputy Governor and Committee
of the East India Company.
This Map is Humbly Dedicated
by Sam^l Thornton.

Tropicus Canceri

ORIXA

THE BALLEFORE

A Scale of 40 Miles

O C = B H A A R = C O S = A S S A M .





A Chart of the
Eastermost part of the
EAST INDIES
and CHINA, From Cape
Comarine to JAPAN, with
all the Adjacent Islands.

INDIA

Tropick of Cancer
BENGALL

TONQUIN

The Bay of
Bengall

PEGU

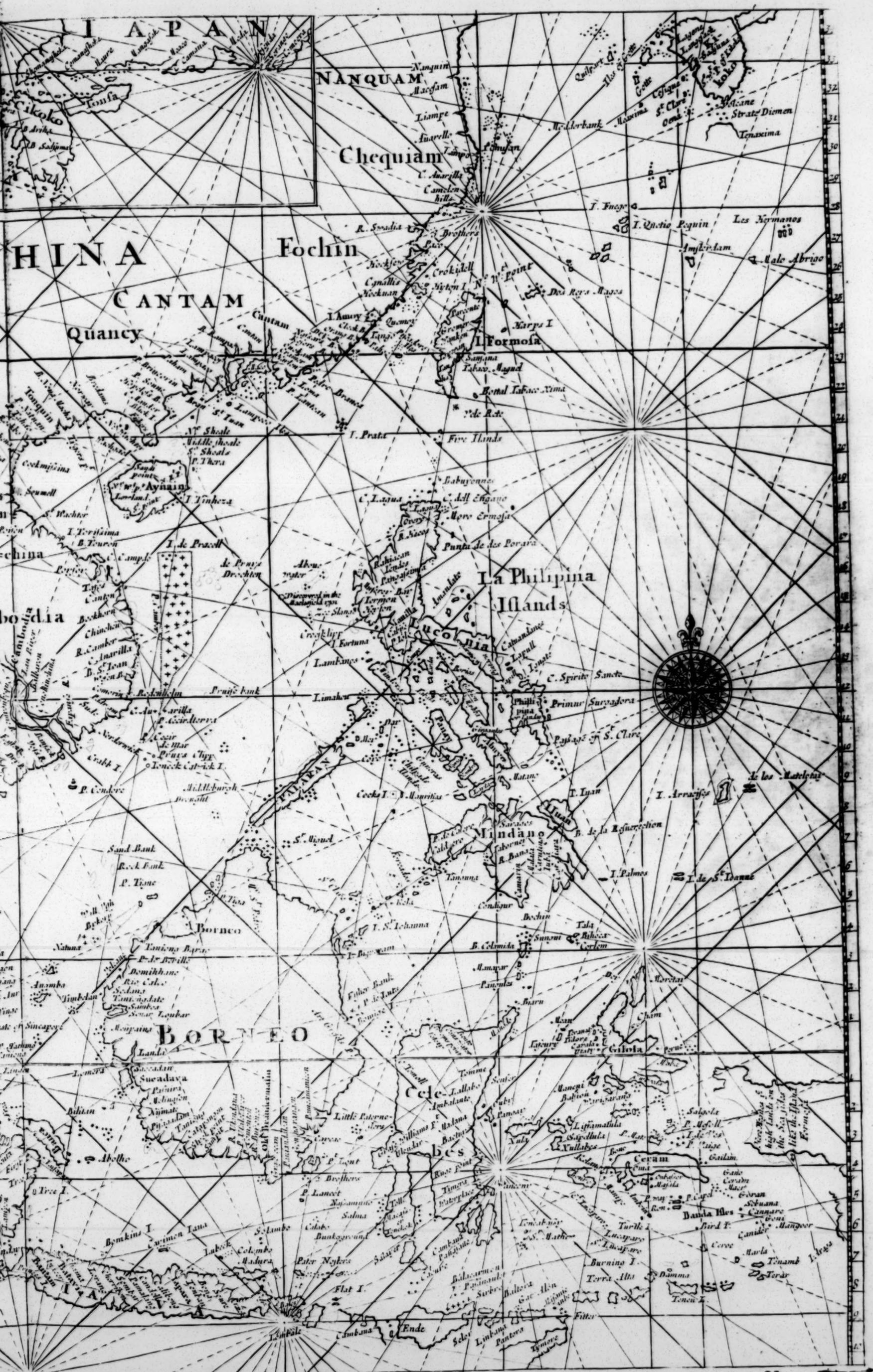
SIAM

Cambodia

Aequinoctial

Line

English and French Latitudes 30 to one degree
Longitude 10 to 120 in degrees
Longitude 10 to 120 in miles
Longitude 10 to 120 in leagues
Longitude 10 to 120 in fathoms



N. and the Westermost Point of *Sagur*, SE. by E. then have you the New Deep open, and may steer away SSW. a little more Southerly, until you can see the high Sand Bank, but then you must have a very great Care not to bring to the North West Point of *Cocks* more Northerly than North North East, for if you do you will be in danger of falling on the Point of *Sagur* Sand, or small middle Ground, which lies at least four Miles off on the West-side in the fair-way 5, 6, 7, 8, or 10 Fathom, some Places Sand, and some Places soft Oazy; whenever the Sand Bank bears West North West know that you ought to steer away South East until you come into six Fathom, and then you must again keep a Point more Southerly, viz. South East by South, but you must mind to keep the Westermost of *Sagur* North and by West half Westerly, or rather North North West from you, and then you shall not be in danger of the outer Point of the Sea-Reef, but if you are any thing near the Sea-Reef, you shall have seven Fathom soft Ground. The Sea-Reef lies along South and by East and North and by West, in the fair way 5 and a half, 6, and 7 Fathom. You must edge no further Southerly, than South East by South, by reason the Ebb runs forcibly to the Westward.

I would not advise any Man to take upon him to enter the Deep in the Night, because the Tide in the Entrance runs so strong, that it is an easy matter for a Man to be out of his Bials. I my self have been twice in Danger, once upon the Sea-Reef, and another Time upon the *Sagur* Sand. But if what I have said be not plain enough to be understood, you may take this further Notice; the *Dutch* in the time of Northerly Monsoons do commonly keep the Buoy placed in four Fathom Water, upon the head of the *Sagur* Sand; West and by South, upon the Pitch of the low Eastermost Point of *Sagur*, 4 Miles distant from the Shore, within Musquet-shot of which Buoy, to the Westward, you will have five Fathom soft Ground; from which Buoy to steer SE. and by S. will carry you clear from the Head of the Sea-Reef; but if the Buoy should be taken up, the best and plainest Direction that I can give, is from sight of the forementioned Sand-Bank bearing N.N.W. to steer thus; that is, when you have brought the aforesaid Eastmost lower Point to bear E. and by N. and the bluff Point next to the Northward of it ENE. you will then be in four or four Miles and a half Offing, and five or five Fathom and a half soft Ground; you may steer SE. by S. not more Southerly, minding to keep the Point of *Sagur*, as aforesaid, N.N.W. from you, so long as you can keep sight of the Land; for you must know that the outermost part of the Sea-Reef, lies South East or South somewhat more Easterly, from the said Pitch of *Sagur* Sand.

Note also, That as the Ebb setteth strongly upon and over the Sea-Reef, so contrary, the Flood sets forcibly upon the *Sagur* Sand; when *Sagur* is Land too, and you in the fair way in five and six Fathom Clay; you may steer away more Southerly, viz. South South East, until you come into nine Fathom, and if thence you are design'd to haul up for *Ballafore* Road, continue your Course out to Sea until you come out of the Bay.

Directions for going down in the Eastern Channel from the Channel Trees along the Shore to Cocks.

This is a Channel seldom used by reason of the difficult Entrance into it over the Point of *Mixen* Sand, which runs here to the Point of the Main, next below the Channel Trees, nor should I ever advise any Man of Choice to go down this way with the Ebb, but because it may sometimes happen, that you may be forc'd to take this Course or fare worse, as one did through the *Narrows*, who was Pilot to two Ships, one of which I was in my self, but was not then acquainted with the River, they both grounded upon the *Mixen* to their great Prejudice, and greater Hazard; another time since, he, with the Master's Consent, had run his Sloop on Shore, had not I, at that time, been acquainted, and taken upon me to carry him out of the Danger. I have therefore thought good to give these Directions in going down that way, which may, perhaps, at one time or other, stand some one or other in stead.

If you, from the Channel Trees, find your self horsed by the Ebb too soon into the Reach of the *Mixen* Sand, which then, in respect of the Tide and Wind, if it be Northerly, will be a Lee-shore, consequently hard to get

up again off from it, you must in such a Case resolve for the Eastern Channel, by steering, if you be a quarter of a Mile from the Shore SW. by W. and so for a while to keep about half a Mile Offing, as near as possible you can guess, and no further off, until you have brought the Point of the Main, next below the Channel Trees North by East from you, and then immediately without further trifling, stand directly in for the Eastern Shore, so as to fetch it close aboard about a large quarter of a Mile below the said Pitch of the Point, and then you shall find deep Water, and soft Ground; you must keep all along the Shore afterwards down to *Cocks*, and in the Channel you shall have soft Ground, and no less than four or five Fathom, only you must note, That being past the point next the River of *Rogues*, the Bay between it and the South Point short of *Cocks*, requires your Care to keep in half a Mile Offing soft Ground, for in that Bay is two small Sands, and a Shoal, and besides the Bank on the said North-side, off the said South Point is a Shoal; and here also Note, That being past the River of *Rogues*, the lower down that you come, the broader you shall find the Channel, in as much as the Main, from the Point below the Channel Trees downwards, lieth along nearest South by West and North by East, and the Stretch of this *Mixen* Sand, the Head whereof adjoining to the Point, runs from thence, nearest South West two thirds of a League, and consequently between it self and the Main, the lower down the broader the Channel.

Directions for going down the Western and Moorish Channel.

The like Danger that lieth in the Entrance of the Western Channel, over the Peak of the *Mixen*, is in the lower End of the Eastern Channel; over the Tail of the Grand middle Ground, where it adjoins to the *Gillingham*-Sand, near the upper Point of that River. Therefore this Channel is seldom used down that way, but with observing these Directions.

You must from the round Bush formerly mentioned, which stands at the Water's Edge, about upper Point of the River *Rogues*, steer over to the River of *Tygers*, on the Western Shore; so as to have *Buffalo* Point, when you pass it, about half a Mile Offing and no more, so shall you go clear of the Head of the Grand middle Ground, and find in the fair way six and seven Fathom soft Ground. When you are over at the River of *Tygers*, you shall find in the Channel down along the Shore, not exceeding a Cable's Length Offing, four and five Fathom soft Ground; but when you are come about three quarters of a Mile, or half a Mile below *Bugdens* Bower, which is a single great Tree, under which stood formerly a mud *Pagoda*, you must Anchor when in soft Ground, about half a Cable's Length from the Shore, and there wait an Opportunity of passing the Point of *Gillingham*, about an Hour and half, or an Hour before high Water, minding to give the point about three quarters of a Mile Offing, and so shall you go over at high Water, and find no less than three Fathom when over, and shot open of *Gillingham*, or a little below it, you may proceed towards *Kedgery*, as before directed, thence to take your Choice which Channel to go out of.

A Description of the Nicobar Islands.

Junckseylone is an Island which lies about fifty Leagues North West from *Queda*, close to the Main; you may Anchor close to the Shore, the People are Civil, the Islands of *Nicobar* lie about ninety Leagues to the Westward of it, they are Islands of good Refreshment, especially the Southermost Islands, the going into it, coming from the Westward, is in 7 degrees 26 minutes North Latitude; your Course through is ENE. you may lie under the Southermost Island in what Depth you please; here also is a Harbour, where you may careen your Ships and get Masts, and Yards, &c. and Provisions plenty; here is Ambergreece found, the People civil and kind with good looking after, but trust them no farther than you can see them; to the Leeward of this *Nicobar* is the *Sombriero* Isle, on which is plenty of Hogs, Fowls and Yams, &c. they come on Board of Ships to Sea. The *Andamans* are dangerous Islands, guarded with Shoals and Rocks, the best Latitude any Ships can steer down in to go to *Mergui*, is in 12 degrees 30 minutes North, you run into the King's Channel, keeping *Ila Grande* aboard, all the way upon your Starboard-side, till you see the Town; 'tis a secure

Harbour for Ships to Winter at, where you may new bottom or build a Ship. If you fall in 13 degrees 30 minutes North, you come foul of the *Mortavans*, which all Men strive to shun, by reason of the Tides meeting that makes a strange boor when 'tis low Water; it rises at once twelve or fourteen Feet; all Men are shy of this Place.

To sail from the Coast of Coremandel to Mergui, in the South West Monsoon.

In sailing for *Mergui* from the Coast of *Coremandel* in the South West Monsoon, make the Southermost of the *Nicobar Islands*, from whence steer for the Islands on the Coast of *Tanajary*, lying in the Latitude of 12 deg. or 12 deg. 10 min. you will there see several Islands, which you must leave about a League or two to the Eastward before you come near *Caboche Island* (to the Southward of which you are to pass) you will see a small round Island in the Offing, which will seem to be the last of the Range. Between this round Island and the other Islands you will see an Island stretching East and West, which is the Island *Caboche*, to the Southward of which is a fine Channel; in passing through it you will soon see *Great Canister Island* bearing East by North, steer between it and *Little Canister Island* for the North Point of *Iron Island*, which being past, haul up to anchor between *King's Island* and *Plaintain Tree Island*, where the large *French Ships* usually lie; or if bound for the River, after you have rounded *Iron Island*, you will see an Island to the South Eastward, resembling the *Great Canister*, which is the *Mudramacan Island*, which you must steer for as laid down in the Draught. This Island makes the West-side of *Mergui Harbour*, where you may be furnished with plenty of Provision, and all Necessaries for refitting, repairing or masting a Ship, having Iron and Cordage of your own; you may either heave down or lie ashore, the Water rising and falling fifteen and sixteen Feet in the Harbour. In steering for this Place you may, if you please, leave the *Great* and *Little Canister* to the Northward, and pass to the Southward of *Iron Island*, which must range pretty near, because of some Rocks near the North West part of *King's Island*, which shew themselves a little above Water. If you do not chuse, or if the Winds do not permit you to run so far to the Southward, as to make the Southermost *Nicobar Island*, you may go through some of the Channels to the Northward; but it's dangerous coming too near the *Little Andaman* either to the Southward or Northward. Ships that leave the Coast of *Coremandel*, to sail to *Mergui*, in *September*, when the Winds begin to be variable, go between *Diamond Island*, and the *Preparies Rocks*, which see in the General Draught; as soon as these Rocks are past, you will have Ground from forty-five to fifty Fathoms, you are then to steer for the Island *Moffos*, and the Island *Tavay*, taking Care to give a good Birth to *Pegu Bay*, because of the great Indraght of the *Martavan*. This Coast from 15 deg. 30 min. to *Tavay Point* is lined with Islands, which are generally without Danger, especially towards *Tavay Point*, where you may come to an Anchor between them and the *Moffos*, which are the last of the Range, bearing West North West from the said Point, which limits the Kingdoms of *Pegu* and *Siam*. The next remarkable Island to the Southward of them is the Island *Tava*, lying South from *Tava Point*, about nine and a half or ten Leagues, which you do not see 'till past the *Moffos* about two Leagues, it stretches about fourteen Miles North and South, and is every where clean, except at the South Point, whence there is a Chain of Islands and Rocks above Water, which run seven Miles out to the Southward, or in a straight Line towards *Iron Island*; to the Eastward of the Island *Tavay* there is a fine Channel of two Leagues broad which you may safely go through, in it you have no less than four Fathom at low Water. If it should be preferable on account of the Winds, you may steer between the *Great Canister* and the Rocks; and in Case of being forced to turn into the Harbour, after having got the length of *King's Island*, you may do it very safely between the Island and the Bank on the Main. But for such as have not been there before, if there be a necessity of turning in, I think it more prudent to get a Pilot from the Shore, and to keep their Boats a-head.

The *French* who frequent this Place more than any other Nation, do (from whom the Draught and these Instructions were procured) pretend, that among these

Islands the Needles varies about 6 deg. 30 min. to the West, which is about 5 deg. more than in the Offing.

When you sail from the Coast of *Coremandel* for *Pegu* you strive to go between the *Cocoa Islands* and the *Andamans*, because of the Southerly Winds, and a strong Current setting into the Bay of *Bengall*, many Ships fall into the Leeward of *Cape Negrais*, and are forced to go into *Negrais*. Going into the Harbour you must keep the Main close aboard, after you are within the Point, for there's a Shoal.

From *Diamond Island*, all the way to the *Red Point* you may keep within Pistol-shot of the Shore, till you come a-breast of the sandy Point of the Island of *Negrais*, and then you Anchor under the Island Landlock'd from ten to four Fathom, soft Mud. This Island lies in 15 deg. 34 minutes North. When you sail from the Island you'll see a little Island seven Miles from you, bearing South South East, and from that Island West South West lies a dangerous Reef, shoal and dry, above Water, about 6 Leagues asunder; if you go between the Island and the Reef, be sure give the Island two Miles Birth, on your Larboard-side. This is called the *Diamond Island*, upon it is abundance of *Turtle*.

From this Island to *Pegu*, is fifty Leagues. You'll see a low Point from the Island, give it a Birth, for it shoals at once. From that Point twenty-five Leagues is *Braque Point*, very remarkable, pretty high (those that are acquainted may go along Shore to *Pegu*) when you come up with *Pegu*, there stands three Trees, which is the Mark for sailing in, the Tide runs strong out; the going in shoal; there is not above 12 or 13 feet going in; but deeper as you come in.

To sail from *Arrakan* you had best fall in by the broken Islands to the Southward, and then run down along the Shore, till you make the Island, 'tis in the middle of the River's Mouth; you leave the Island upon the Starboard-side, that is the best Channel, called the *New Deeps*; you must be very cautious in Trading here. You must Trade on Board, the Trade is profitable, but they will cut you off if they can. Going into *Negrais* you have from sixteen, to seven, six, eleven Fathom, and at *Arrakan* six, seven, five, four, eight Fathom, the Land low, except *Cape Negrais*, and a Saddle-hill upon the Island. Upon the South Point of *Great Negrais*, turning in, is on a small Hill a little Pagoda, and four Toddy Trees, standing singly to be seen very remarkable. The Point is bold going in, and within, by *Little Negrais*, and the River on *Great Negrais*, is a very good Harbour.

Little Negrais, or Dear-Island.

Is a small Island about three Miles in Length, and one in Breadth, it is seated at the Entrance of the large River called *Negrais*; this Island lies in 16 degrees 12 minutes North, and distant from the Southermost part of the *Great Negrais*, four Leagues South half West. On the Northermost end of this Island is a large high Hill, and on the top of the Hill is a Rock whence arises a Spring of good Water, some part of the North West end at Spring Tides is covered with the Sea.

The Salt Water River, in which this Island lies, is Navigable for Ships of the greatest Burthen; but on the Larboard-side going in, lies a Ledge of Rocks about Pistol-shot from the Shore, dry at Low-water; and if necessary, you may keep them close on Board without Danger, but standing over to the Eastward you will have four Fathom Water, and if you should be forced to stop a Tide, this is the best Ground to ride in, there running but little Ebb or Flood, which on *Great Negrais* is very flat; here it Ebbs and Flows two Feet North and South, as you sail up the River, you will have from sixteen to six Fathom, various Soundings, as you keep the great Island on Board, but all clear Ground; the best anchoring is near the low sandy Point on *Little Negrais*; by this Point is a little Creek, running up into the Island, whereby it may be known, and when you are within a Cable's length of the Shore, you will have six Fathom Landlock'd from all Winds; also there is good Ways for laying Ships a Shore; the Watering-place is at the Foot of the Mountain, on the North-end as aforesaid; here you may ride in five Fathom, oozy Ground, half a Cable's length from the Shore.

To sail into Pegu River over the Bar.

Bring the great Tree called *Bowl of Punch Tree* to bear North by West half West, and steering right with it, carries you over the best of the Bar till you come into 5 Fathom, and so haul up North West and North West by North, edging on and off on the Western Sand between five and four and a half Fathom, all Sand and Oazy, from whence keep mid Channel till you bring the West Point of the River to bear South by East, then will the *Bowl of Punch Tree* bear North East half North, the first Reach lieth North East half North, you keep the Larboard-side on board, Depth from five to seven, ten and sixteen Fathom gradually, and then shoalen to fourteen, eleven and nine, at which time you will enter the second Reach steer North West, keeping the Larboard-side of the River, in Depth eight and a half and eight Fathom, which will bring you in sight of *Daguig Pagoda*, bearing North from you; in this Reach you will have from eight to ten Fathom, and thence to six and a half, then six hard Ground; and then you will enter the third Reach, which lies North by West, Depth on the Larboard-side gradually, from four and a half to sixteen Fathom, as you sail along to the fourth Reach, on whole Starboard-side is a very long Sand, so that you must stand over for the Larboard shore, where you will have seven Fathom, but if the Tide heave you to the Westward, and the Wind faint away, you will shoal your Water to three and a half Fathom and two and three quarters Fathom, but presently deepen again to 6 and 7 Fath.

On the East-side of the Southermost of the Cocoa Island, which lies in the Latitude of about 14 deg. and about 20 min. North East by North from the North East end of the great *Andaman*, is very good anchoring in a sandy Bay, where is Wood and Water.

Along the West side of the *Andaman* Sand is *Corally* Ground, and in some Places Rocky Ground, and great Overfalls, in some of which is Oazy Ground; there is muck Rock Fish.

Mr. Davenport, Pilot, his Directions for the Entrance into Negrais.

It has been affirmed by several that have been at this Harbour, that from the West Point of this Island, called little *Negrais*, or *Dear* Island, which lieth on the South East side of the Harbour, there runs a great and dangerous Reef, quite over to *Diamond* Island, which, with sunken Rocks and Breakers by them, renders that Opening unpas- sable even by a small Boat; from whence they seem to infer, not only an impossibility of going to the Island, but

also an absolute necessity of keeping the West part of great *Negrais* on board and their Entrance into the Harbour; and indeed I cannot but own that whether you come from the Eastward, between the *Legeada*, and *Diamond* Island, or from the Westward, it is your best way, if you have a leading Gale, to bring *Diamond* Island East from you, about six or seven Miles distance, at which time you will have twelve or thirteen Fathom Water, sandy Ground, and *Pagoda* part, or Westermost bluff Point, on the opening *Negrais*, bearing North East from you, then you may securely steer in for that Point, and giving the Rocks that lie a small distance both of that, and the next bluff Point, a Birth of about half a Mile, you may boldly stand in for the River, and not expect less in the Entrance than four Fathom and a half at low Water; nor can I think with a Westerly Wind and a Tide of Flood to be too venturous with the Easterly Flat, at the Entrance into the Harbour, but yet those Assertors of an impassable Reef, or Ledge, which they say lies between these two Rocks must give me leave to say they are mistaken, since, by Experience, I have found to the contrary; and whereas I perceive they speak by guess, I can with more Certainty say, that I have found that those Breakers which with the South West Monsoon appears very high and very dangerous, do neither render that opening impassable, nor proceed from any foul Ground or sunken Rocks, but those Breakers proceed from a Sand which lies four Miles and a half into the Sea from *Dear* Island: Being a level Sand, and affording at the highest Breakers three Fathom Water, at low Water, though I would not advise any one to be too bold with it, by reason of the untowards Seas that often runs upon it, with the first of a Flood, especially if an out-wind blow fresh, nor on the other side are you tied up at the Entrance into the Harbour to keep close on board the *Pagoda* Rocks; for if the Wind blow Westersly off Shore, or Easterly, so that you cannot lay it in upon a Stretch, you may stand over so far as you please towards *Diamond* Island; but you must be sure to keep the *Pagoda* Rock, and the red Cliff on *Pagoda* Point in one, or very little open to the Eastward of the said Cliff, and the South Point of *Diamond* no farther South than South South East, for so you shall never have no less than four and a half Fath. and will keep without the Pitch of little *Negrais* or *Dear* Island; I say, will keep without the Pitch of that Flat, and so may stand in securely; nay, if there were occasion to pass to the Northward Island, keeping in the aforementioned Bearings, or half a Point more Easterly, until you come without a short Mile of it, may safely do it; for in the Tract you will have six to seven Fathom, and may steer right in for the Mouth of *Porian* River, on the East-side of *Dear* Island, in five, six and seven Fathom, only minding to give the Flat, which lies Eastward, a small Birth by keeping Mid-channel.

Of Sailing in the Eastern Seas, between Sumatra and Japan.

Achein, a City on the West North West end of *Sumatra*, hath Latitude 5 deg. 40 min. you may ride in seven or eight Fathom, or at Low-water in five or six Fathom. The Road is to the Eastward of the Castle, a high Hill in the Country. South Eastward from you the Ground is oazy.

To sail from Achein to Priaman, and from thence through the Streights of Sunda to Bantam.

If you were at *Achein* and would sail to *Priaman* (which is a Town on the Main of *Sumatra*, on the South West side) in the Latitude of 50 min. South, and in Longitude of 80 deg. 40 min. East from Cape *Bona Esperance*, which is the best Place for Pepper in all the Island, for there is four Towns N. ward, near the Equinoctial, which do bring all their Pepper to *Priaman*. The Coast is very dangerous, with Shoals, and more Islands than you can well number: But this is the best way from *Achein* to *Priaman*; to wit, to the Westward of *Priaman* are Islands in the Latitude of 1 deg. and a half, called the Isles of *Nimton*, your Course is to go with these Islands. Come not near the Main, but keep the Sea till you see them; keep in the Latitude of 1 degree 20 min. and you shall only fall with the North end of the biggest of the two, which is near twenty Leag. long, called, *The Island of Good Fortune*, but there are

many little Islands near it; but when you are at this Island you may go up by it, for it is the bolder of the two, yet keep your Lead going to prevent a sudden Danger, where you will find no less than ten Fathom. When you are that within these Islands your Course is East by North eighteen Leagues; however sail not by Night, but rather hull, and sail by Day. And though *Priaman* and this Island lies East by North and West by South, yet steer away ENE. and NE. by E. and then you shall see three Hummocks on the Main before you can see the low Land; and having sight of them, you may go in till you see the low Land of the Main; but look well about you, for when you see those Hills come to the North East from you, there is shoal Water and stony Banks, but you may discover them in seven Fathom, then are you six Leagues from the Road of *Priaman*. When you have the Hills North by East from you, you shall see many Islands to the Southward, the first will shew white, and none of the rest. The Land in the Country, about *Priaman*, is high, and much like a Saddle; the midit of the high Land beareth from the Road North East by East.

This Notice is given, because there are four Islands before the Road you ride in, for you may mistake to go within these Islands when you come from the North West, because they will not open.

There

There is good opening between them, leaving 2 on the one side, and 2 on the other; but come not near the little outermost Island by the Main; for there is sandy Ground. Come no nearer than 8 or 9 Fathom, till you come with the other three Isles that lie in a row, and then go to the Southward of the Northernmost of the 3, and under that Island is the Road; and be bold with it in 4 or 5 Fathom, because it is but narrow between the Island and the River coming from the Town about the breadth of the *Thames at Blackwall*. Upon the Island is a good Well to Water at. Moor your Ship sure. The People are still begging, though very courteous.

Tocou is from this Road seven Leagues, it is shoal Water, and bad for Ships. The People bring their Commodities to *Priaman*, from whence, 10 Leagues to the Northward are no Islands, but to the Southward are many, till you come within two degrees of Latitude.

When you will sail from *Priaman* you may go within the Island by the Road, because the Southernmost Island hath a Sand lying close by it; your Depth is 5 or 6 Fathom.

In sailing along to the Southward keep the Main still, and go not amongst those Islands for there are Shoals and bad Ground. Sail not by Night, but Anchor rather, till you come in the Latitude of 2 degrees 13 minutes, for when you sail by the high Land that is some distance from *Priaman*, it is very dangerous. Keep within 20 or 30 Fathom of the Main, and when this high Land comes to the Eastward of you, edging near these Islands, 13 Leagues from *Priaman*, the Road hath but 4 Fathom stony Ground; and running a little towards the Main is 16 and 12 Fathom, for near the Main is no danger, keeping your Lead going.

Being there your Course is S. by E. along the Coast till you come in 2 deg. 30 min. then to 3 deg. 10 min. SE. and then to 5 deg. SE. by S. the Land very high; and in the Latitude of 4 deg. 10 min. is a very good Road, under an Island, hard by the Main, where you may ride in 7 Fathom and no danger but what you see. 2 Leagues WSW. from this Island is a very dangerous Shoal in the Sea; the Sea breaks much upon it, wherefore keep near the Island, and give your Point a Birth, it is named by this People *Sellabar*; the high Land is in Lat. 4 deg. 10 min. it is extraordinary high. The Course along the shore is SSE. Easterly, till you see a little Island close to the Main; it is in the Lat. of 6 deg. or much thereupon; here shall you see a round Hill in the Country East from you, which will be North when you come by the three Islands by the Point of *Sumatra*. The Course from the little Island to the other three is East South East distant four Leagues; the Land by the Water side not very high, but in the Country high. The Depth by the Shore is 54 Fathom, but East and West of the three Islands is but 16 Fathoms, and further tp, the round Hill being North from you is 30 Fathom.

Now if you go into the Road of *Marrough* you may boldly bear in amongst these Islands North East by East till you come to the Main, where you shall have twenty or thirty Fathom, and no danger but what you see.

And when you come in with the Main four Leagues West South West from this Head-land, which is called *Marrough*, you shall have to the Northwards of you all Low-land, and many Islands, but you must go up to the Head-land of *Sumatra*, East South East, for this Road *Marrough* is along the Shore, from the three little Islands by the Main, till you come almost to the Point that maketh the Streights of *Sunda*; you may Anchor in ten and twelve Fathom a fair Birth off, and good Refreshing; but if you come up with the three said Hills or Islands Westerly, and from the other, which are distant, as is said before, from the East and West Islands by *Sumatra*, ten Leagues, and would go for this Place of *Marrough* here with the High-land North, when you are to the Westward of the South Salt-hill, go right with it, for the Land about it is like a Horn. Here is no Danger, the Latitude of the Southernmost Salt-hill is 5 degrees 58 min. and Longitude from the Cape *Bona Esperance* 86 degrees; which Salt-hill lies nearer *Java* than *Sumatra* by two Leagues. You may see both Mains at once, if it be clear weather, in the midway. The Land of *Java* in the Country is high, but

low by the Water side; the Stream in the Streight sets 12 Hours one way, and 12 Hours the other, but very strong, for you cannot stem it sometimes with a stiff Gale; therefore go and Anchor on one side, it is no matter which; but if you go on *Sumatra* side go no nearer the Main than the Island that makes the Streight, for there is a Rock almost in the midway; but it is commonly seen either breaking or above Water, which lies W. by N. from *Sumatra*.

The way to *Bantam*, when you are about the Point *Palimbang*, which lies South East by South from the Head-land of *Sumatra*, which makes the Streights, is East South East and South East by East, till you see the flat Island, called *Pulo Ponjong*, and is distant from the Point of *Sumatra* nine or ten Leagues. When you come with this Island you may go on either side of it, but come no nearer the Island than 5 or 6 Fathom, then if you look upon the Main you shall see a round Hill in the Country, bearing between the S. and S. S. W. from you: This Hill standeth right in over the Town of *Bantam*; if you have it South South West from you, go in on that Course till you see the five Islands called *Pulo Hemas*, by which Islands is a Road, you may ride in what Depth you will more than four Fathom Oazy Ground, the Water riseth five Fathom in the Road.

Directions for those that shall fall in with the South West Part of Java.

If you fall in so far to the Eastward as to have the Island of *Vantros*, alias *Trowers*, North West about nine Leagues from you, which often so falls out, I would advise you to steer West North West about nine or ten Leagues, at which time you will have the Westernmost Island, called *Claps* Island, which is low and full of Trees, North something Westerly, about six Miles from you, from whence I would advise you to steer West, or West by South about four or five Leagues, and after that such a Course as may bring you and *Claps* Island East North East and West South West from each other; about 10 or 12 Miles from hence, steer for the South West head of *Java*, your Course thither being North something more Easterly; and when you are a-breast of it, you will open the North Point, between which and the South West head is a small sandy Bay, in which is many sharp Rocks, but they shew themselves very boldly above the Water. These Rocks at the first opening seem to lie off a Point of the Island, about which Point seems to be a great Inlet, but as you approach near it, it is as before said, a small sandy Bay; from hence steer away for the North Point, over which Point you will see *Hippens*, alias *Princes* Island, which trenches South West into the Sea; the distance from the South West Point of *Java* to the South Point of *Princes* Island, is about twelve Miles, and the Course North by East, having the Wind at South East, you may luff close aboard the North Point, opening the Streights, keeping the Lead going, where you will have twenty-two, sixteen and seventeen Fathom coral Ground, with small white Shells, on *Princes* Island side, and after you have rounded the Point you will open a deep Bay, which runneth towards the South East, in which is an indifferent great Island, and a small Rock; and from your last Soundings, until you come past midway, between the said great Island and the West Point of *Welcome Bay*, you will have no Ground at thirty-five Fathom; but as you approach near *Welcome-Point* you will have thirty and twenty-five Fathom, being about three Quarters of a Mile from the Shore. The Island of *Java* and *Princes* Island is extrem full of Woods; between these two Islands is the Passage into the Streights of *Sunda*, the Course lying thro' nearest North East half East, being a very fair Channel, and no danger but what is visible to the Eye.

Note, In the Streights S. of *Sunda*, between *Princes* Island and *Sumatra*, is very deep Water towards *Sumatra*, and in some Places without Ground; but along the Side of *Java* there is all along good Anchor Ground at twenty and thirty Fathom Depth, so that it is best to keep along that Side; but you must take Care that you come not too near the Shore, for fear of running upon it.

Under *Princes* or *Hippens* Island, entering the Streights of *Sunda*, there is found such variety of Depths, as you may come to an Anchor where you please, and in what Depth you please, either in 15 or 20 Fath. Water, and there to stay to expect the Wind coming from WSW. being that the Wind thereabouts, under the Shore, bloweth sometimes

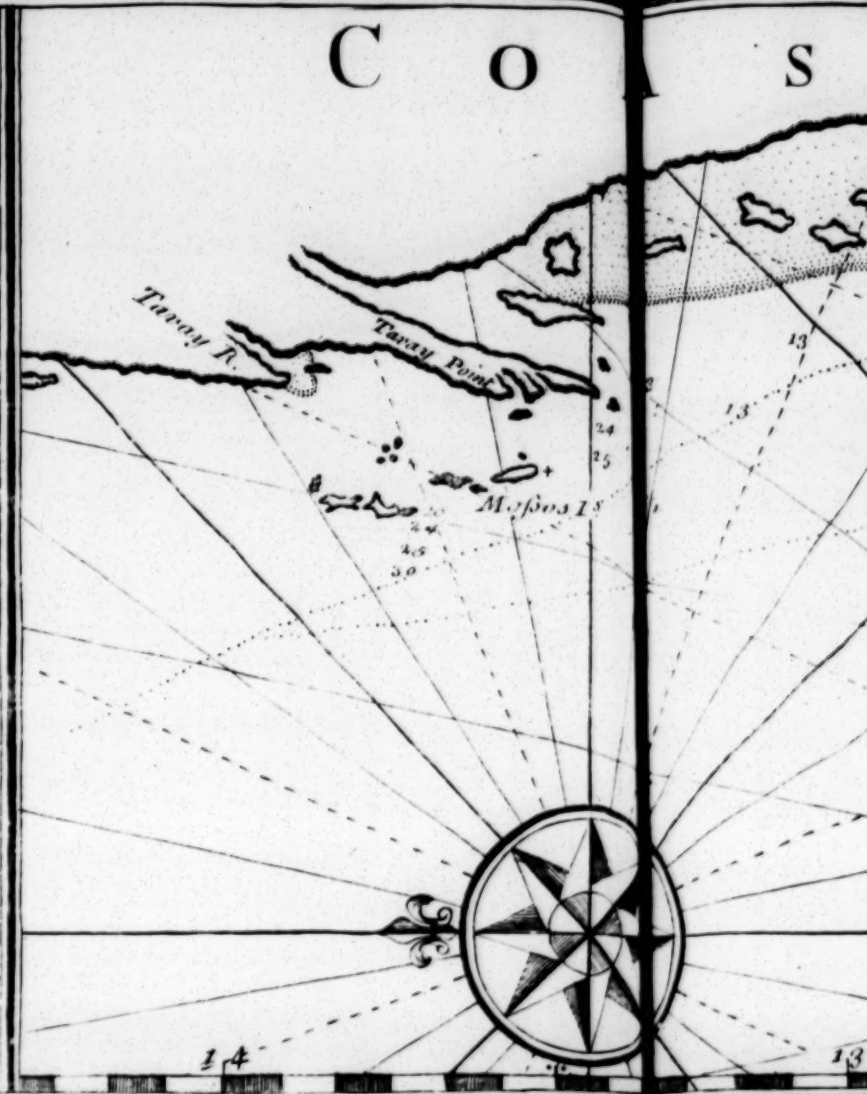
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Room Cat

A

New (and) Correct Chart of
MERGUI
with the Islands. Adjacent &c.
Shewing the Sands, Shoals,
Banks depths of Water
(and) Anchorage &c.

Sold by Will^m Mount and Tho^s Page on great Tower hill
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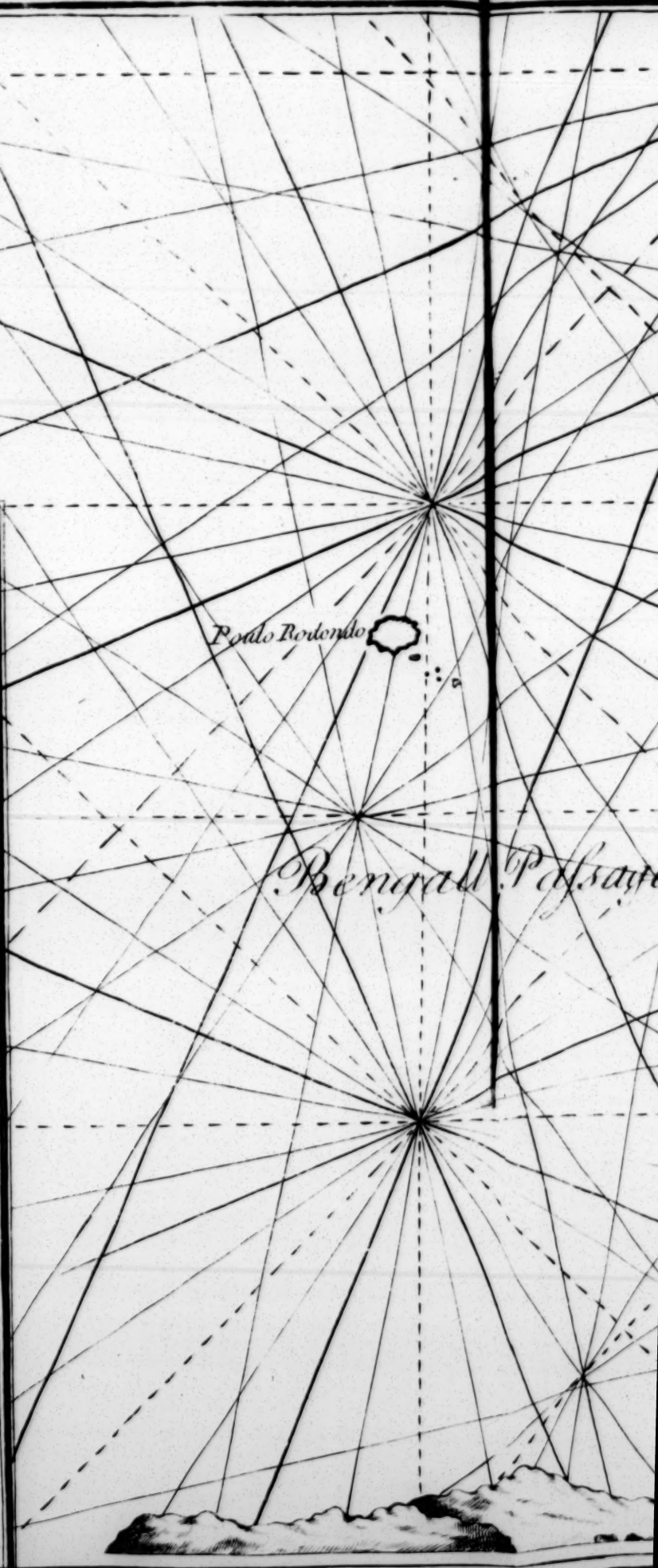
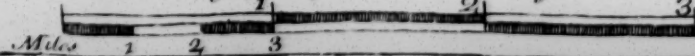
New and Correct Chart of—
ACHEEN ROAD
with the Islands adjacent &c. Shewing
the Sands Shoals, Banks Depths of Water
and Anchorage &c.

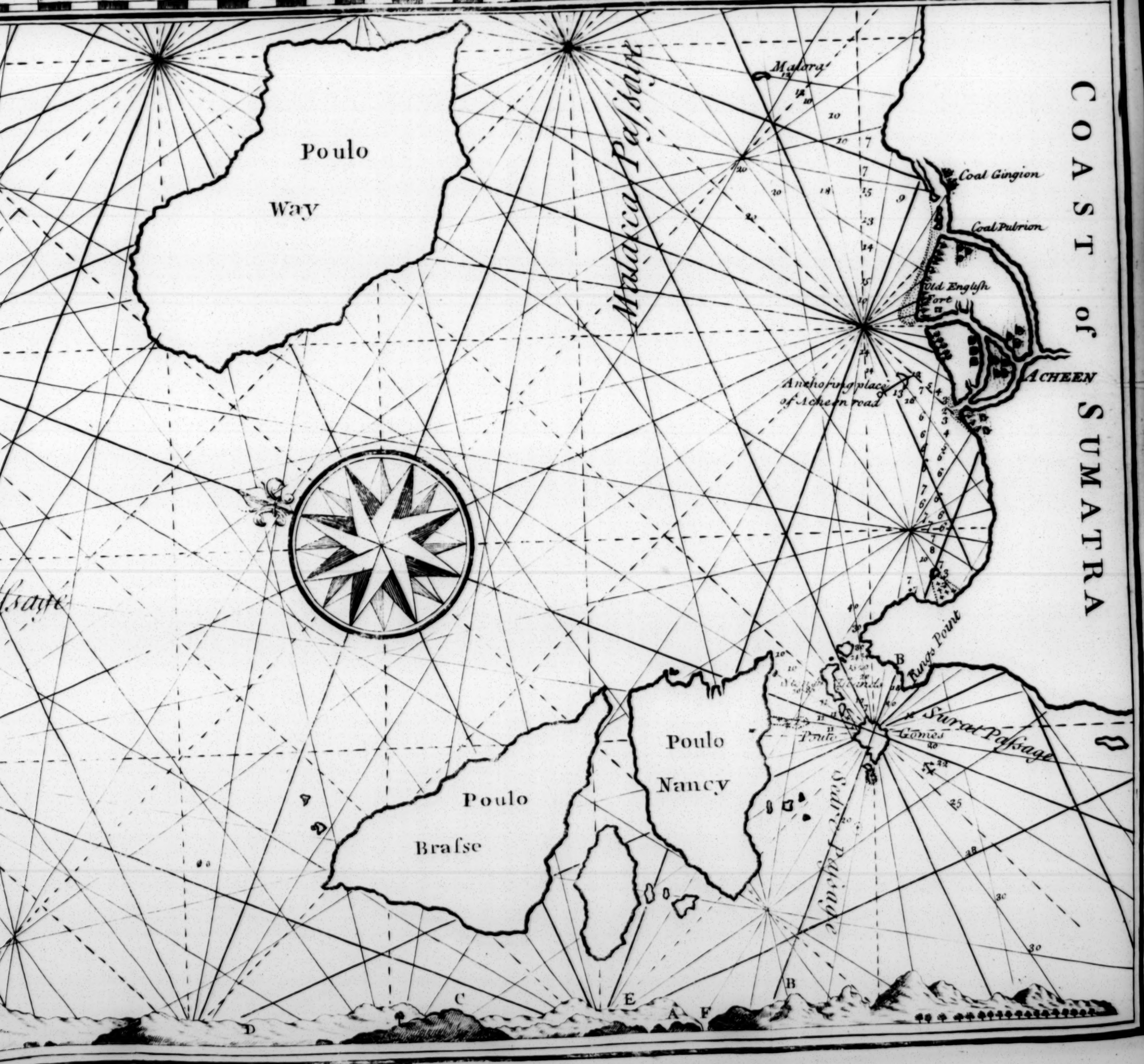
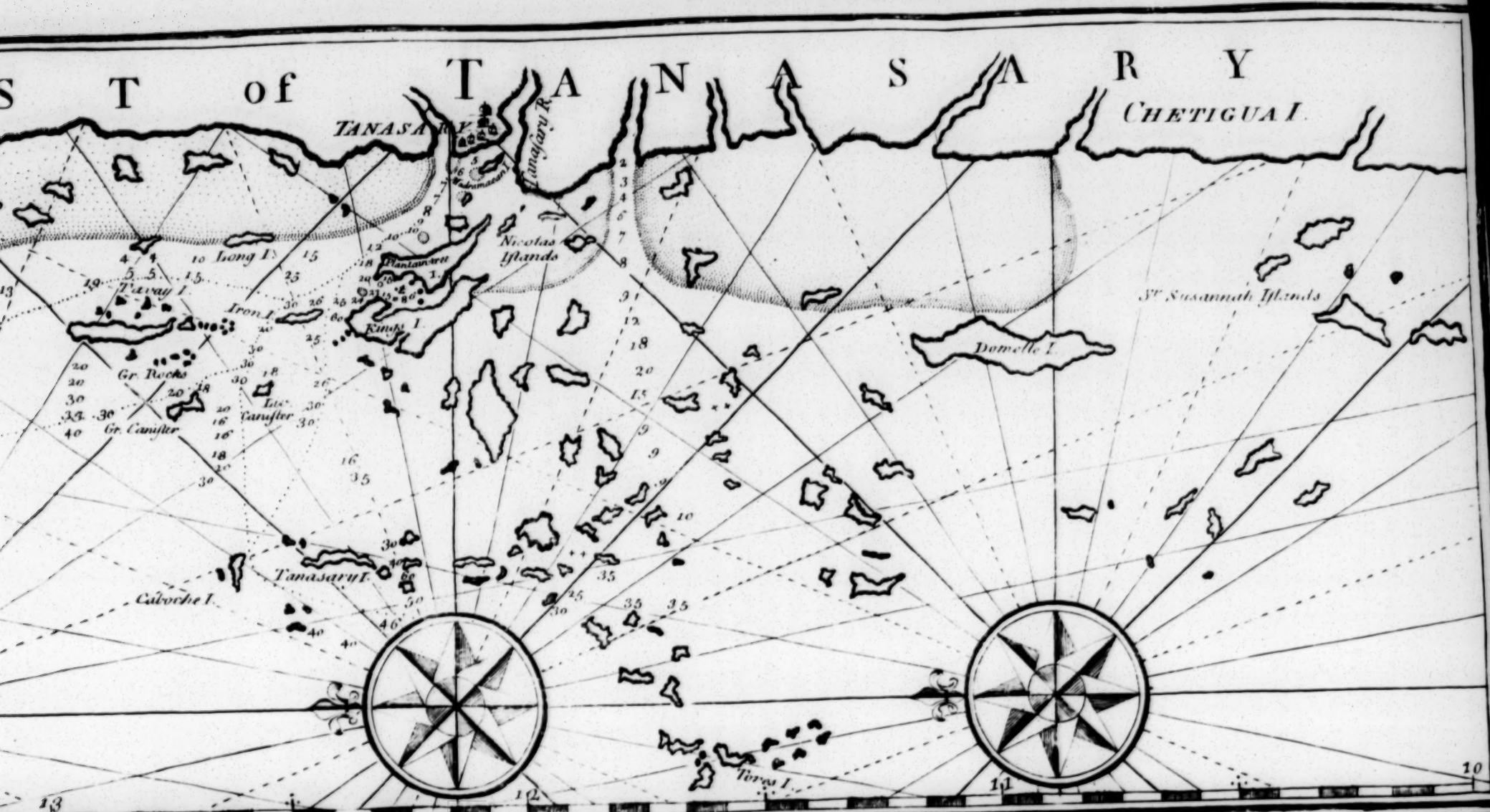
Acheen road lies in the Lat 5° 30' N it's shelter'd from the S.W. Monsoon. The Ships coming from the Malabar or Coromandel Coasts usually come in by the Surat passage which is good but very narrow between the Island A. and Sumatra. Note a S.E. Moon makes high Water among the Islands and in the Road.

The prospect of the Land is when the Island A. bears N.E. by N. 3 Leagues. B is Kings point C. Poulo Gomes. D. Poulo Nancy. E. Poulo Way F. Surat passage.

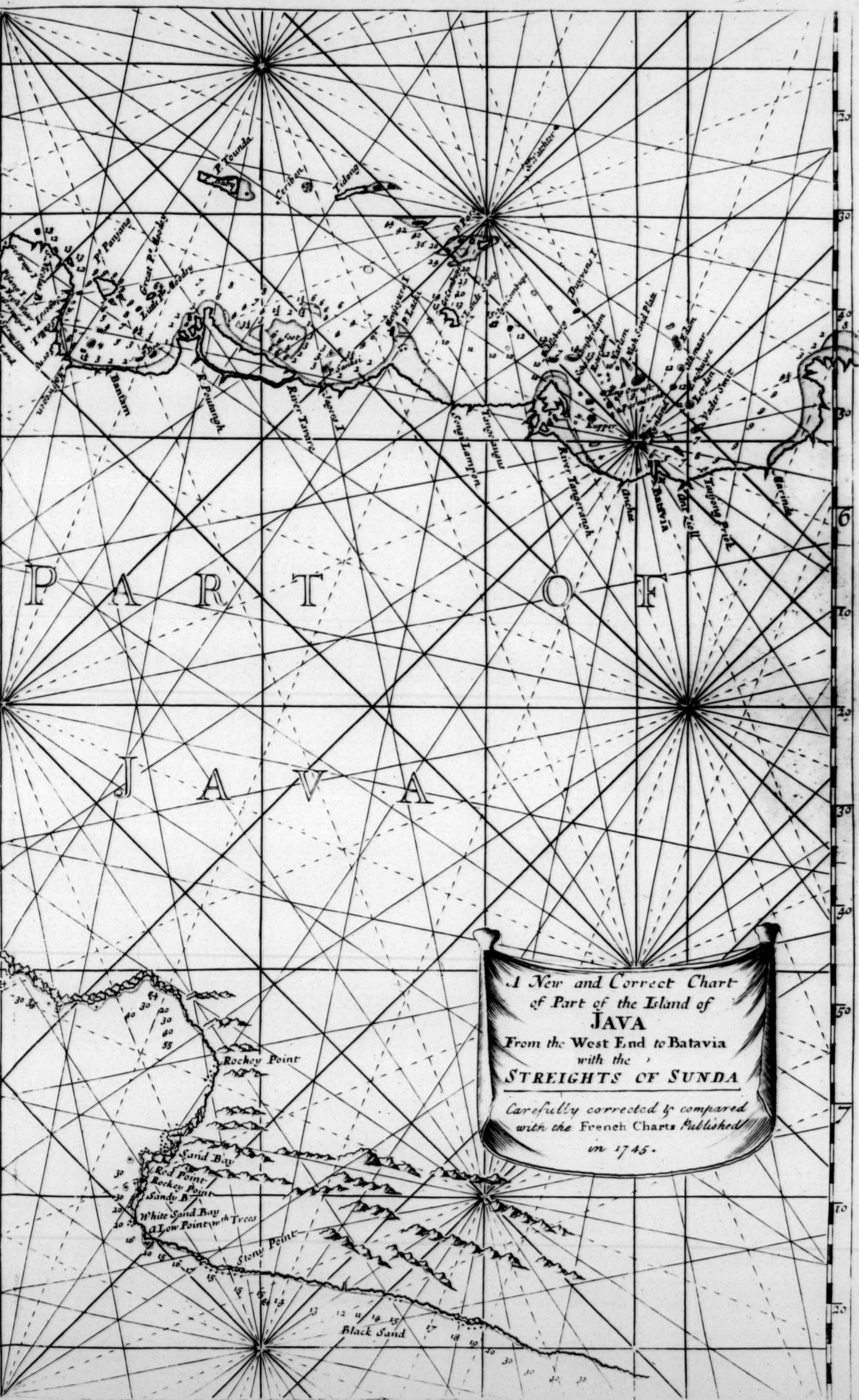
The Sedre passage is not so dangerous as laid down in many drafts, there is only one shelf of Rocks that lye W.S.W. from Poulo Gomes on the Sea breaks & another stretches from Poulo Nancy to half Channel over.

A Scale of 3 Leagues 20 to a Degree —









out of the ordinary Course, which is at Sea West North West and North West, having then the Winds from the West North West, you may conveniently come from below the said Islands about the flat Point of Sumatra, and without the Streights of Sunda, where the Wind turneth again from the North to the West, and you may set over South West by South, or also South South West, till you come to ten or eleven deg. South Latitude, to find the South Easterly Winds.

Between little Combuys and the Java Shore is a Rock, on which the *Sarab* Galley was a-ground, Anno 1701, at which Time had these Bearings, *Midlerbough*, East by South, *Duffins* Island North East by East, and little *Combuys* North West by West.

Of Sailing from Bantam Point through the Streights of Banca.

In the Easterly Monsoons, sailing from Bantam Point to the Northward in the Night, you must observe to keep to the Eastward, for when you have the Streights of Sunda open, you will meet with a very strong Current, setting to the Westward, also you may very often encounter with the Wind at North East, which may be the loss of five or six Days.

About thirteen Leagues North and by East from Bantam Point, lies the *Brewer's* Sand, which are very dangerous to come near in fair Weather, for when the Sea breaks not on them, they are but small Spots, and about five or six Feet Water upon them; you may go either to the Eastward or Westward of them; if you go to the Westward of them, keep the two Sisters about three Miles from you, and when you have them West South West off you, then the Sands will bear East North East; the distance between the Sands and the Sisters is about ten Miles, but the surest way is to keep the *Bead Roses* on Board, and then you will leave the Sands well to the Westward and from Sumatra over to the *Bead Roses*, or a Thousand Islands, you have very good Anchoring.

From the Sisters.

Your Course is North North East, and I would advise you not to keep nearer the Shore, than the aforesaid Course; for in the Latitude of 3 degrees, 55 minutes South, there lies an Island on the East-side of Sumatra, near the Shore, which hath a shoal trenching to the Eastward, it is not late to come nearer this shoal than seven or eight Fathom, for it is Rocky, and such uncertain Soundings upon it, that it will surprize him that is never so well acquainted, as often proves. After you find yourself to the N.ward of this Sand, steer in for the Sumatra Shore, in five or six Fathom; and keep your Lead going, and that Deep shall bring you sight of *Lucapara*, which makes the going in of the Streights of Banca. When you are past the aforesaid Island, if you keep not the Sumatra Shore on Board, you may be set on the South end of Banca, where is all foul Ground.

When you have sight of *Lucapara* there is no necessity to respect a Course, because of the Streams that run there, but apply your self to the Lead, and keep in five Fathom Oazy, which will give you the distance, both from the Sumatra Shore, and *Lucapara*; were it not for the Streams you might depend upon a Course, and keep *Lucapara* five Miles from you, but the Lead is the safest; when you have *Lucapara*, East North East off, then there will appear a little Peak in the middle, and you shall find the shoalest Water, being four and a quarter Fathom; but the most Danger is when it bears South East, then you must be sure to keep Sumatra on Board, in five or six Fathom.

In sailing through the Streights of Banca, it is not safe for one unacquainted to venture in the Night, for some times of the Moon, or when much Rain falleth, as there seldom wants, the Stream runneth very strong, not keeping any regular Course, so that if you loose the Soundings of Sumatra Shore, you may soon be upon Banca Shore, which you must avoid, when you approach *Pollenham* River; which disimbogues it self sometimes so strongly into the Streights, that it requireth much Care to keep you off the Rocks that lieth off of *Monopin*.

In sailing from *Monopin* to *Lingquin*, you must not depend absolutely upon your Course, for the Island *Ling-*

quin being laid down in the Draught to far Wetterly, you may in an obscure Night, run ashore, therefore your securest way is, when you go from Banca, to keep your Lead going once or twice a Glas, keeping off in twelve Fath. until you come to *Pulo Parra*, and then from thence to *Lingquin*, exceed not the Depth of eighteen Fathom, which shall bring you within five Leagues of it, you will there meet with strong Currents to the North West, but depend upon your Lead.

In sailing from *Lingquin* to the Island *Pulo Ponjong*, you must depend wholly upon your Lead, keep the Depth of eighteen or twenty Fathom, for if the Current sets you into the Streights, you may be carried upon the Island, which will be of evil Consequence; also about eighteen Miles to the South Eastward of Point *Ponjong* lies a Sand, which you must be careful of, which if you observe the forementioned Depth, you keep the best of the Channel.

The *Robert* and *Nathaniel* struck on the Westernmost of the two Sands that lie to the Northward of *Lucapara*; the Water appearing deeper a-head, made all the Sail he could, and after three several strokes got off into five Fathom: The *Macclesfield* grounded at the same Time, for about an hour, and would in all Probability, have been past Recovery in a little Time, had not the Flood lifted her. This Sand bears from *Lucapara* North West, and from the first Point of Sumatra South East by South, and at low Water hath in many Places, not two Fathom, and at high three and a half.

To go clear of these Sands, Outward Bound.

Steer in from *Lucapara*, N W. by W. or W N W. (and you will have from five and a half to six and a half and seven Fathom Water) until you are within a Mile or two of Sumatra, as your Soundings will direct, into four and a half Fathom Water. Then steer away for the first Point, borrowing into the foresaid depth, but be sure to keep no further off than six Fathom at most.

The Southernmost of the *Anambas* bearing North East by East nine Leagues distant; there lies from that Station a Rock that is high, bearing from thence West by North one League; it is bold and high out of the Water, and bears from the Body of the *Anambas* West South West, distant about nine Leagues, Latitude 2 deg. 50 min. North. I have conversed with a Dutch Commander particularly acquainted here, who assures me, That between *Lucapara* and Banca is much the better Passage, the least depth being eight Fathom. The Banca Shore is bold and good, until you come a-breast of Sumatra's third Point, and from thence no worse than our Drafts makes it, and the Dangers visible; which Passage is much frequented by the Dutch, who as they pass it, commonly send a Boat a-head, to the great *Poulo Manca* for Water.

Capt. *John Harle* in the *Macclesfield* coming late last Year from China, the Sun in the Zenith, and deceived by the South East Current, took the *Poulo Toteys* for *Poulo Toupon*, and fell in with the Back-side of Banca; he found very good Soundings, eighteen or twenty Fathom a reasonable Distance from the Shore, some small Islands on the Coast, but so near, that none would covet to go between them; he went between the Islands that lie off, and the South end of Banca, in mid Channel, eighteen Fathom, but believes they might have gone much nearer the Shore, and recommends it as an extraordinary Passage: whether this has effected the Dutch or not I cannot tell; but 'tis very certain, they have since sent a Ship to make a compleat Discovery of it.

A Description of the West Coast of Sumatra, from the Streights of Sunda, to Achein, coming from the Southward.

The Course from the Entrance of the Streights of Sunda to Bencola is North West about 50 Leagues, there being no Place of Note between them; it is a bold Coast, and no Danger but what appears.

Bencola lies in the Latitude of 4 deg. 9 minutes South, and Longitude from Cape *Bona Esperance*, about 86 degrees. You Anchor in Bencola Road in ten Fathom Water, between the Sea Coast Island and the Main, which Island must be brought to bear North West, and the

Union Flag, on *York Fort* East by North a quarter East, about six Miles off, at which time *Sellabar Hill* will bear North East half East about ten Miles off. The foresaid Island hath many Rocks lying on and about it, therefore come not too near it. North by East half East about three Leagues from you, lies the Town of *Singlo de Moon*, the Cape which bears from you at your anchoring Place, East half South, distant about three Leagues, is very dangerous, there stretching a Ledge of Rocks from it a pretty way into the Sea.

About midway, between the Anchoring Place, and the shore is a Shoal or Bank, whereon the Sea breaks very high, and much with Southerly Winds.

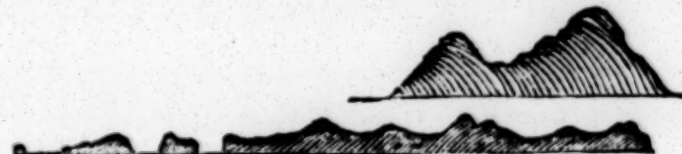
The Course between *Bencola* and *Pulo Rongin*, is North West by North, about forty-five Leagues; a clear Coast.

NW. by W. half W.

Pulo Rongin lies in the Latitude of about two Degrees, five Minutes South.

After you are enter'd between the Island *Pulo Rongin* and the Main, being midway, your Course is North by West along, and you will have Depth between twenty and thirty Fathom oazy, continue your Course, keeping as near the middle as you can, for off *Batacapas*, a little to the Southward lies a funken Rock, and one of the Islands is foul. As you shot up along you will see an Island, which makes like this Figures underneath, but when you come up with it, it makes in four or five Islands; and when a-breast of it, *Pulo Sinck* will bear North East. Run fair by *Saddle Island*, in the inside, giving them a small Birth of half a Mile, or thereabouts.

then the Point will be NW. Westerly.



Thus sheweth the seven Islands at the North Point of *Banca*, bearing SW. half W. ten Miles off.



Ditto W. by S.

And when you are well shot up with it, steer directly for the West-side of an Island that will bear off you North by West, distant from the *Saddle Island* two or three Leagues, until you are half way between this Island and the other; then haul away for the Cape, which is called by the Country People *Pulo Panjack*, and by the Dutch, *Broken Hook*; both these Islands, to the Northward and

Southward is found, as far as we could see, from twenty to thirty Fathom oazy, the Northward Island will make in two when you come up with it, and when you are pretty well shot up with the Cape, that it bears North West, and the Northward Island East by South southerly, then will the Island off the Cape appear as this Figure.

In this Form appears the Island of the Cape.

N.W. a quarter N.

Passage.

N. by W.

And when you see the Passage open before you; it lieth through North by West; when you enter the Passage, there appears but two Islands, which you must leave on your Starboard-side; but after you are shot by the first (which hath a small Island at the South End) you will see an Island, or Rock, which is very high and steep, which Rock you leave on your Larboard-side, it is steep, within a quarter of a Mile; when you are past that then are you past the narrowest part; steer directly through or

rather near the Island side, and when you are shot thro' you will see a small Island bearing North East, or thereabouts, and another North North West, steer directly with this Island, until the small Island beareth East of you, giving the small Island a Birth of four Miles or thereabouts, then haul in North North East, and North East by East, for the Road of *Padang*, which appeareth as the Figure underneath.

In this Form appears Padang.

Padang Head.



N. *Pesang*

You have good Depths through the Streights, and when through, until you are within two Leagues of *Padang*, from twenty-five to thirty Fathom oazy; and so it will shoalen gradually, until you are under the Island *P. Pesang*, which makes the Road of *Padang*, for a North West

Wind, and there you may Anchor in seven and a half Fathom, the Island bearing North West and by West. You may sail round this Island; there is nothing but what you may see.



Thus sheweth *Pesang Island*, bearing N. E. half E. 5 or 6 Leagues off.

From *Pulo Pesang* your Course is North West and by North, depth from twenty-five to fifteen Fathom; as you draw near *Sumatra* shore, it will shoalen, and if near the Islands it will deepen. You may sail by the Island *Gottotangy* in fifteen Fathom, within two Miles of the Shore, or thereabouts, for it is not so foul as the Draughts makes it, neither is there any Shoals to the Eastward Islands, but they lie between them. This Channel is broad and good.

From the Island *Pulo Gottotangy*, your Course is North West until you get sight of three Islands by the Main, or the Islands that lie off of *Priaman*, depth from fifteen to twenty-three oazy, then steer directly for the Southernmost of the three, giving to the South West Point of them a

small Birth. When you are shut up with the Island, keep within two or one and a half Cable's length of them, and the same distance of the second and third, keeping them all three close on Board, and you will have Depth from six to three and three quarters, at Low-water.

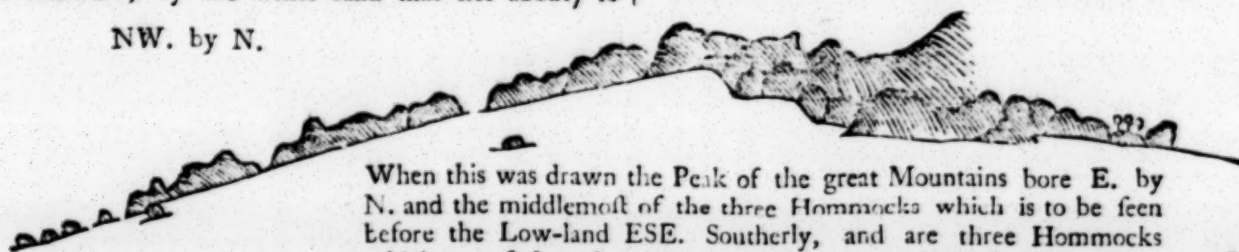
Come not near the Main, for it is all foul, when you are shut up with the second Island you are in the narrowest Place, not broader than the River of *Thames* at *Deptford*, then will you have but three Fathom and three Quarters, the Sands some of them will appear dry; continue your Course close by the three Islands, until the North Point of the Northern Island bears West or West by North, then

The Island in the Sea Home to the third Island is a Range of Rocks.

then haul over North for the Main, until you see the Channel open'd before you; then for the Island that lieth on the Main North West, and the Island that lieth to the Westward, in the Sea South West, then haul out West, and West North West, by the Island on the Main, giving it a Birth of a Mile and something better, for there is foul Ground about it; also there is a Ledge of Rocks from the Island off in the Sea, home to the three Islands. When this Island on the Main is abreast, you will deepen your Water gradually, from seven and a half to nineteen, oazy. You must not go too far to the South-west of this Island, for if you do, the Breakers that lie from the Island, off in the Sea, home to the three Islands off of *Priaman*, will take you up, but keep about a Mile from this Northern Island, as aforesaid, the Channel being better than three or four Miles broad.

From this Northern Island, which you leave on your Starboard side as you sail out, and on your Larboard side as you sail in (and is to be known as you come in from the Northward, by the white Sand that lies about) to

NW. by N.



When this was drawn the Peak of the great Mountains bore E. by N. and the middlemost of the three Hommocks which is to be seen before the Low-land ESE. Southerly, and are three Hommocks which you first make; when you come in by *Good Fortune's* Island (the North-end.)

NW. half W.

And as you draw up with them there will be two Islands that lie to the Southward of all the rest, and bear off each other East half South, and West half North; between these two Islands you must enter, for between all the rest it is foul, which you will see break, if there is any thing of a Sea; run in North, until the Eastermost Island beareth SSE. and the Westermost South West, then you will have depth five Fathom. From off the Island you must direct your Course with the Cape-land, which you will see before you, keeping fair within three Miles, or thereabouts; come not under twelve Fathom, and that depth will carry you clear of a Rock, which lies off of this Cape, call'd Point *Batbong*. This Rock hath not above two Fathom on it; you may go within it in 6 Fathom, without fear; when you are abreast of it, you will see a small Island, or high Rock, that hath Trees on it, half open of the North part of this Point *Batbong*.

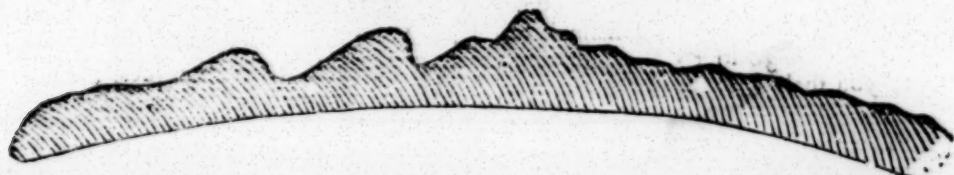
the three Islands off of *Terraw*, your Course is North West, distant about seven Leagues, the Shore between them is wholesome and sound, depth between 17 and 20 Fathom, oazy. These Islands you may sail fair by within and without, but not between them, neither must you go too far off Shore in the Night, for there lieth a range of Breakers all along from the Islands that are off of *Priaman*, to the Northward of *Terraw*, about 3 or 4 Leagues; but as you draw up to the Northward you must go farther off Shore, but you may go by your Lead, keeping the depth of 19 or 20 Fathom, till you come up with *Terraw* Island, and then the depth of 23 and 25, but not higher, for there is no good nor clear Passage between the Island off of *Priaman*, and *Pulo Batbong*.

From the Island of *Terraw* the Course is North West and by North, distant 15 Leagues, or thereabouts, to the Island that lieth off of *Eyerbanna*, between which and the Main is a good Road; when you are distant about 5 or 6 Leagues, they appear as the Figure underneath.

Breakers N. by E.

This small Island is very near the Shore, as you sail along you will have a fair sight of *Batbong*, which South East part is all foul, but the Northern part is wholesome and sound. From this Point *Batbong* to *Po Mousle* is nearest North West and by North, distant twenty five Leagues or better, but Course and Distance must not wholly be trusted to, for the Current is uncertain: A long between these two places there are small Islands, but they and the Shore too, are both wholesome and steep, but it is not good to come under eighteen Fathom, nor exceed twenty six, and there is room enough. *Po Mousle* is indifferent high Land, and so is the small Island which lieth at the South South East End, which maketh like a Sugar-Loaf; they are to be seen in clear Weather eight or ten Leagues, and when you are about seven Leagues, they will make as the Figure underneath.

The High Land of the Main.

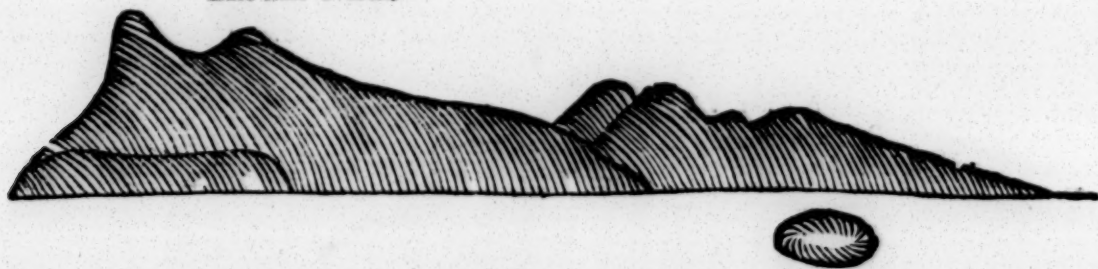


N. 6 Leagues,

This Passage is between *Mousle* and the *Sugar Loaf Island*, depth 22 Fathoms, and it is in breadth better than two Leagues. You may go close on board of either of them; there is no danger but what you will see. You may run fair if you please by *Po Mousle*, which lieth along North West nearest. North East and by North from the

Northermost end of Point *Mousle*, lieth the Road of *Barras*, and is to be known by a small Island which lieth before it, which you ride under, when this Island beareth East half South, and a bluff High-land, in the Country, East half North, then it will appear as the following Figure.

East half North.



Under this Island is the Road of *Barras*; when this Island and the Peak is in one, then are you before the Road of *Barras*.

From this Island that lieth off of *Barras*, your Course is West North West, distant 15 Leagues, which will bring you in a fair way to go between *Pulo Panjack*, and Point *Sencbell*, depth from twenty six to eighty all oazy,

until you begin to draw near *Pulo Panjack*; and when you first make *Pulo Panjack* it will appear like the Figure underneath.



When this was drawn, the South-part of the Cape bore N. by W. half W. depth 16 Fath. then judge the Breakers to bear N. half E. and the Southermost Point of *P. Panjack*, rising out of the water. Which

Which Hommock it is good to keep West and by North, or West half North, and that will carry you clear of the Rocks that lie off of Point *Senebel*, until the said Point, or Cape *Senebel* bears North North East, and then you will have 20 Fathom: But soundings are uneven here. From whence haul in North half East, with Cape *Sitocost* until the Hommock upon *Pulo Panjack* bears West half South, then run boldly in for the Main North East, and NE. and by N. and you will see the Breakers off of Point *Senebel*, continue your Course North East and by North, and North North East, until you are within a quarter of a Mile from the Main, then haul up North, and North by West, or along the Shore keeping within a quarter of a Mile, or thereabouts, to shun a funken Rock which will lie without you, and hath but 2 Fathom on it; it will be a-breast of you, when the Hommock on *Pulo Panjack* bears West by South half South, and when West South West, you will be shot to the Northward of it; as you come along, and thro' this Channel you will shoalen your Water from 20 to 8 Fath. very uneven soundings, sometimes hard ground, and sometimes soft Oazy.

You may keep within two Cables length of Cape *Sitocost*, and you will have depth from nine to eleven Fathom. From hence you have a clear Coast to *Achein*, the Land lying along North West, or North West by North. When you are through, as you haul to the Northward, you will deepen your Water.

Directions for sailing from Achein through the Streights of Malacca, Sincapore, and Diron.

From the Rock that bears from you in the Road ^{Achein Road.} North East half East, 7 Leagues distant, your Course to the *Diamond Point*, or *Tanjongore*, is E. by S. and East South East, distant 42 Leagues, but it is very rare to meet with a Gale to lead you through all along Shore, the Winds are so unconstant; when you are come about half way, be it sooner or later, keep four or five Leagues off Shore, and have a great care you come not too far off, for fear of a Northerly Current; if the Winds fail, and the Tide be down come to an Anchor here.

When you come with the aforesaid Point, you may haul within two Leagues of it, keeping your Lead going, for the nearer the Point the deeper the Water. And from this Point the Island *Pulo Varrar* lieth nearest South East by East 28 Leagues. *Pulo Varrar* lieth in the Latitude of 3 degrees 59 min. North. Here it flows West South West, the Tide of Flood runs stronger than the Tide of Ebb; the Flood sets here South East by South; upon this Island you have very good Wood and Water, the Watering-place is at the South-west part of the Island, but it is something difficult to get into your Boat, the Shore being Rocky; this Island is steep too on every side.

S. half E.

SSW.

SSW. ¼ W.

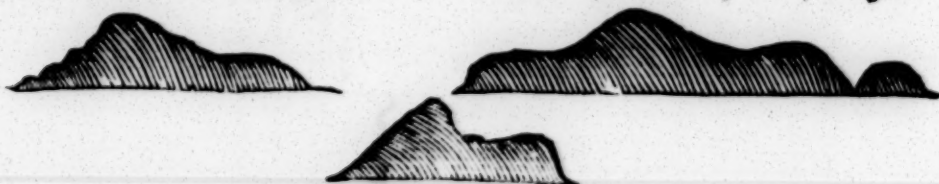


Thus sheweth the Islands of *Arroe*, bearing from South a quarter East, to South South West three quarters West, four or five Leagues off; the Latitude of the biggest is 2 deg. 54 min. Here the Current sets strong to the South South East.

P. Varrar
Water
Island.

Keep along Shore at the same distance, and go within or without, but not out of Anchor-ground, for the Tides are very uncertain, you may sail round them, within half a League. From *Pulo Varrar*, South South East, 8 or 9 Leagues lies the Water Island; and from the Water Island between the East by South and the East South East 20 Leagues, lies the Rocks or Islands of *Arroe*; and when you come to bring the long Island of *Arroe* West by South about seven Leagues off, then will *Pulo Parcelar* bear East by South half South, distant 11 or 12 Leagues; then according as you have the Tide of Ebb or Flood, you must steer to bring it to bear East by South half South; if you have the Channel open, the Tide of Flood sets South East by South two Miles an hour, something more or less, and the Tide of Ebb North West half West (which is much altered according as the Rains disembogues themselves) you will have deep Water in the Channel, between the Island of *Arroe* from 30 to 50 Fathom, when you are in the Channel, you shall have oazy, but as you

draw near the Island of *Arroe*, or the Sand, you will have hard Ground, the Sands are very steep, as 20, 13, 7 Fath. and in the Channel the Soundings are uncertain, from 50 to 40 and 35 Fathom, and in the Channel, between the Sand is 19 and 13 Fath. uncertain Soundings, but when you come under ten Fathom, then have a care of the Point of the Sands, for *Pulo Parcelar* bearing E. half S. you have but 5 Fathom on the Northermost Point of the Sand; and if it be Spring-Tide you will see the Breakers on it two or three Miles long; when you are shot within the Sands, you will deepen your Water as 21, 22 Fath. Oazy, and if you are shot over to the Eastward, where is deep Water, and you see the Trees under *Pulo Parcelar*, there you will meet with a Bank of Sand, that hath but 8 Fathom on it, and between that and the Shore 17 Fath. good level Soundings. I suppose this Bank may run from the Point of the North Sand; when *Pulo Parcelar* bears East South East nine Leagues, then it makes as the Figure underneath.

Island
Arroe.Point
Parcelar.*Pulo Parcelar* ESE. 9 Leagues.*Pulo Parcelar*, E. by N. 4 Leagues.

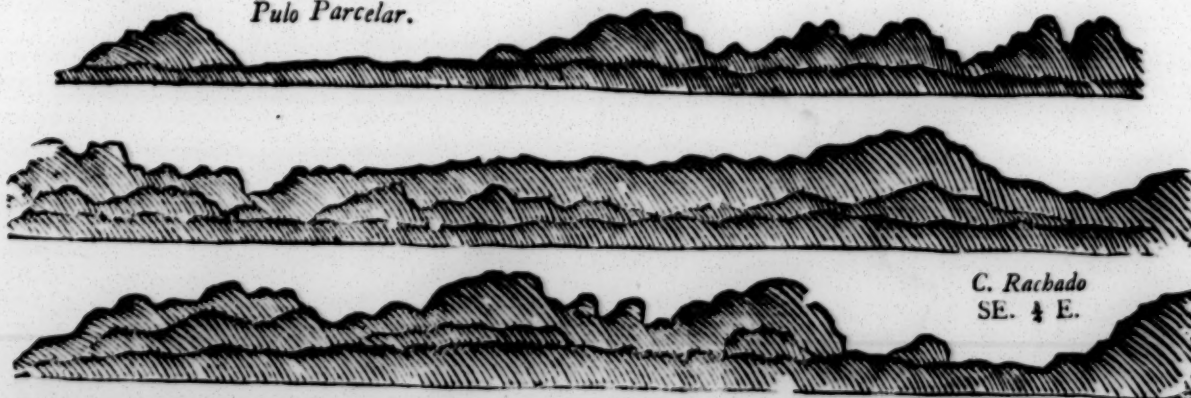
Thus sheweth *Pulo Parcelar*, bearing East distant about 6 Leagues.

Pulo Parcelar and Point *Arroe*, lie East and West one from another; and are about twenty Leagues asunder; the Hill *Parcelar* stands upon the Point or Neck, which is

low Land, and hath no high Land near it, neither to the Eastward nor Northward.

NW. by N.

NNW. half W.

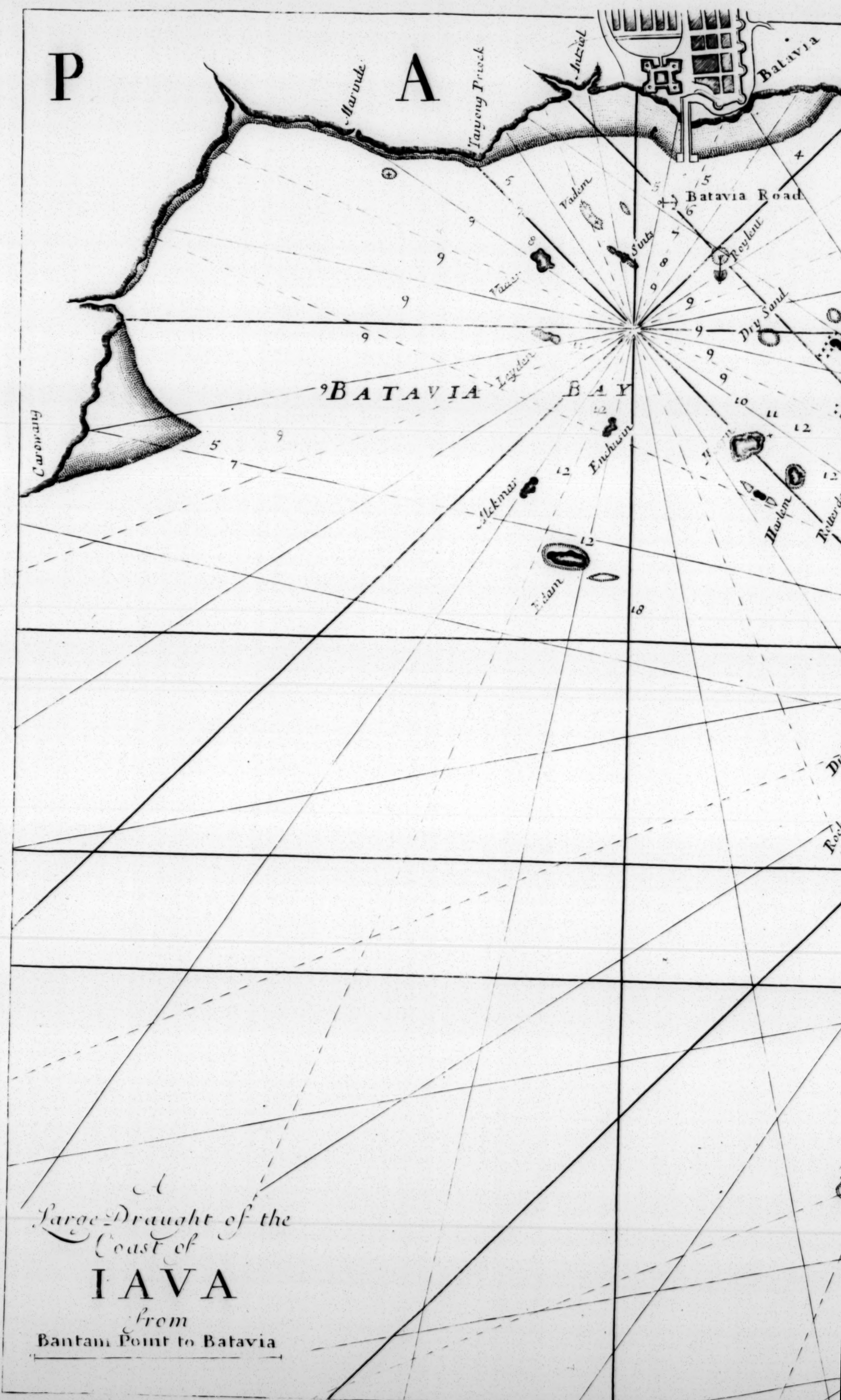
Pulo Parcelar.

Thus sheweth the Land between *P. Parcelar* and Cape *Rachado*; these 3 being joined together.

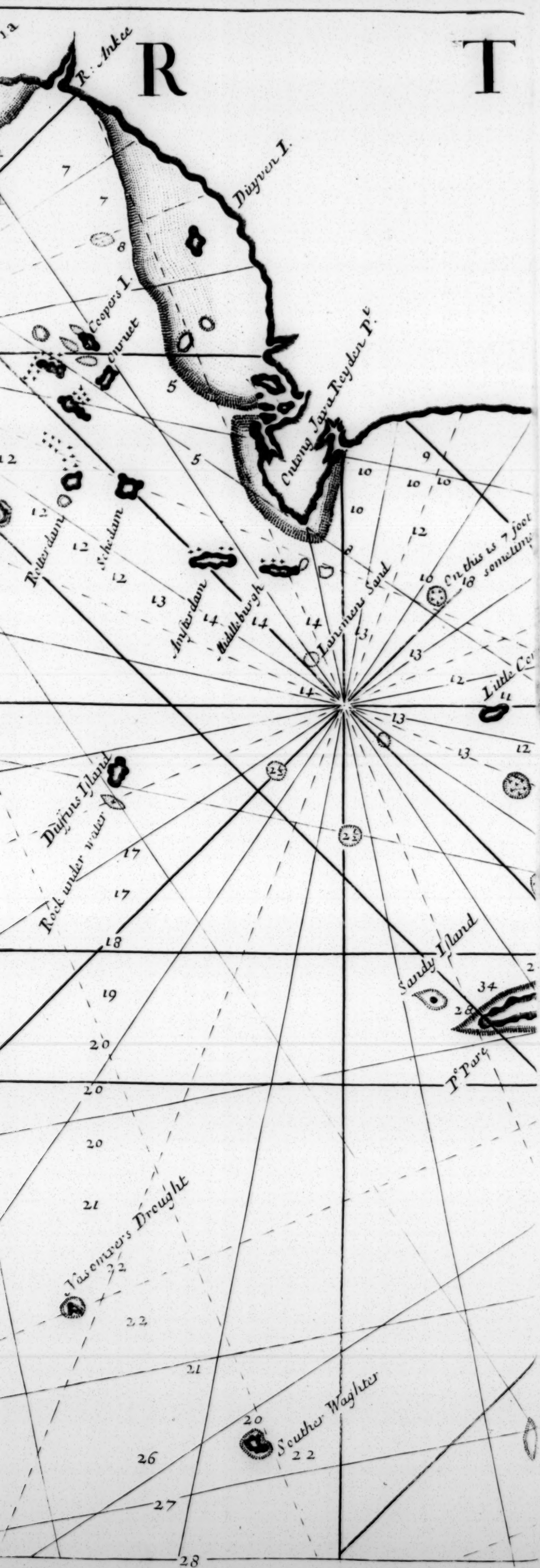
From

Map Room - 1st

35



A
Large Draught of the
Coast of
JAVA
from
Bantam Point to Batavia

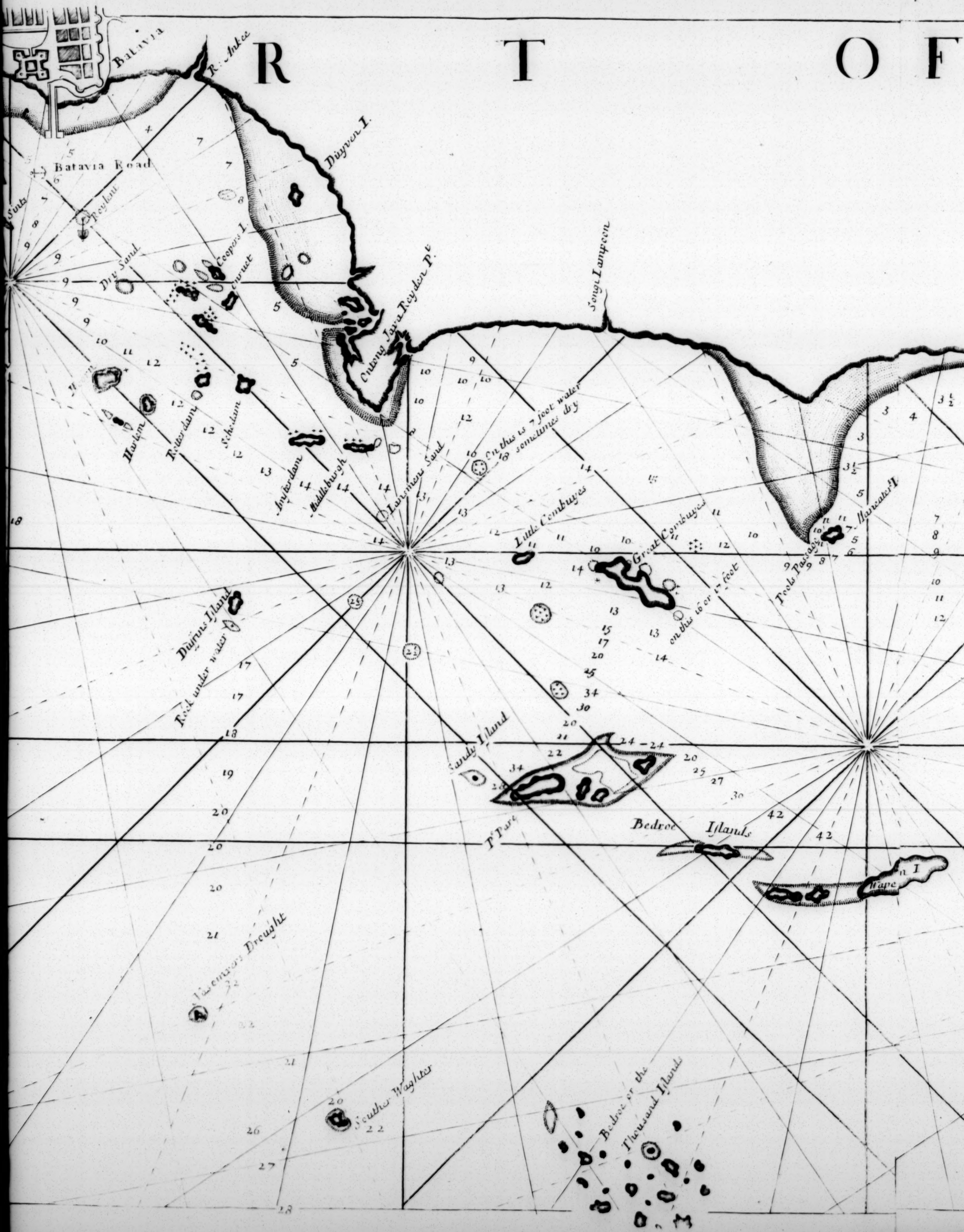


R

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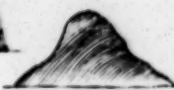
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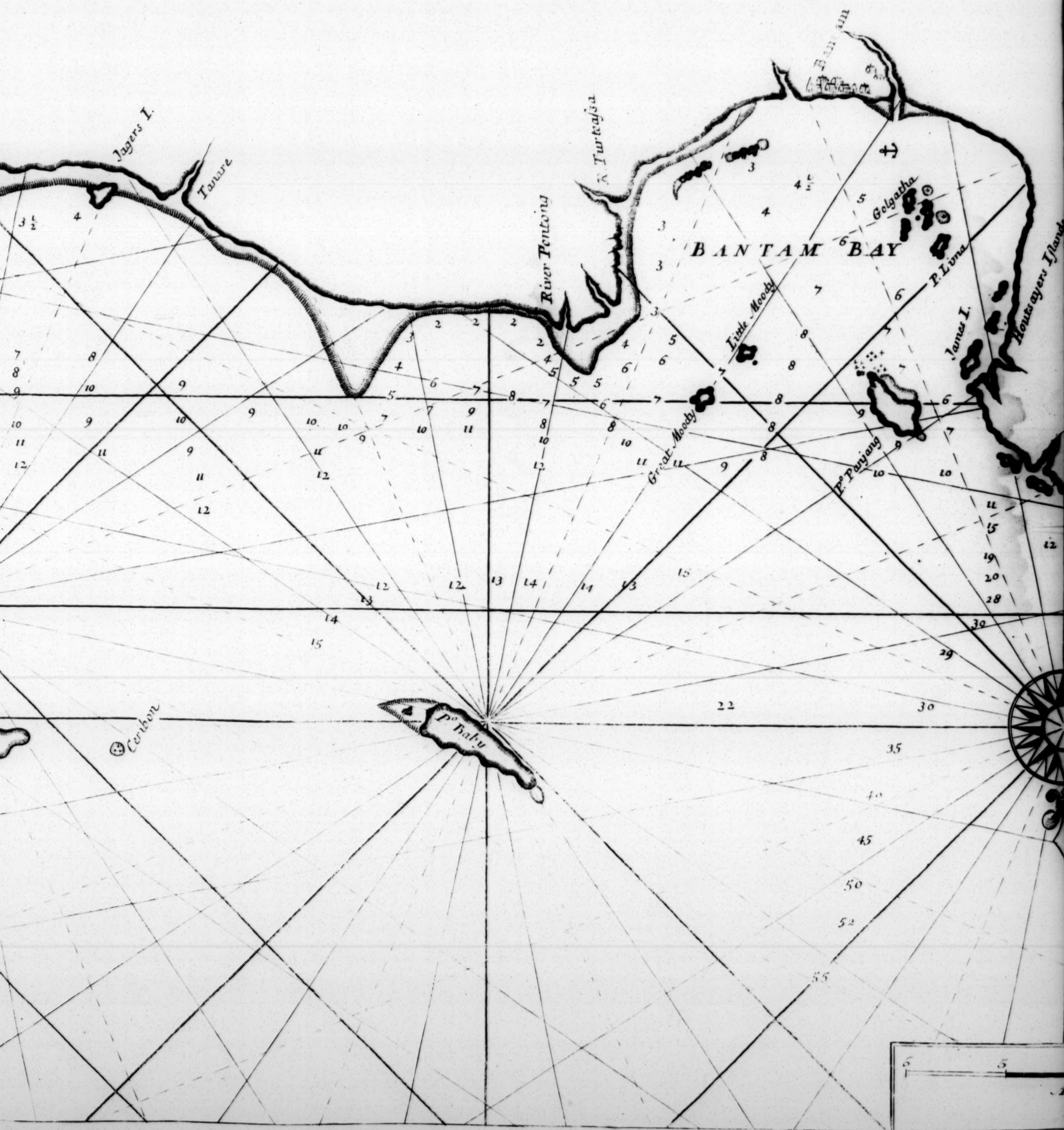
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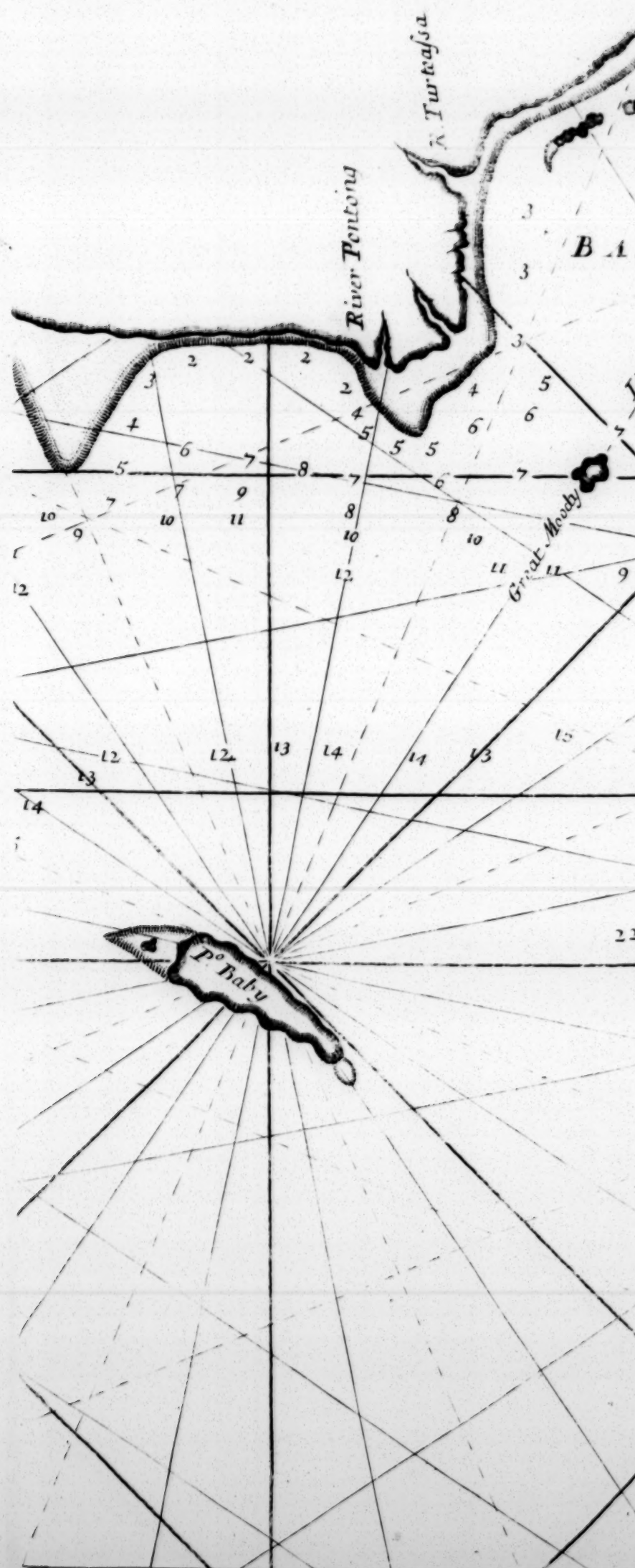
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A

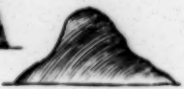


Bantam Hill





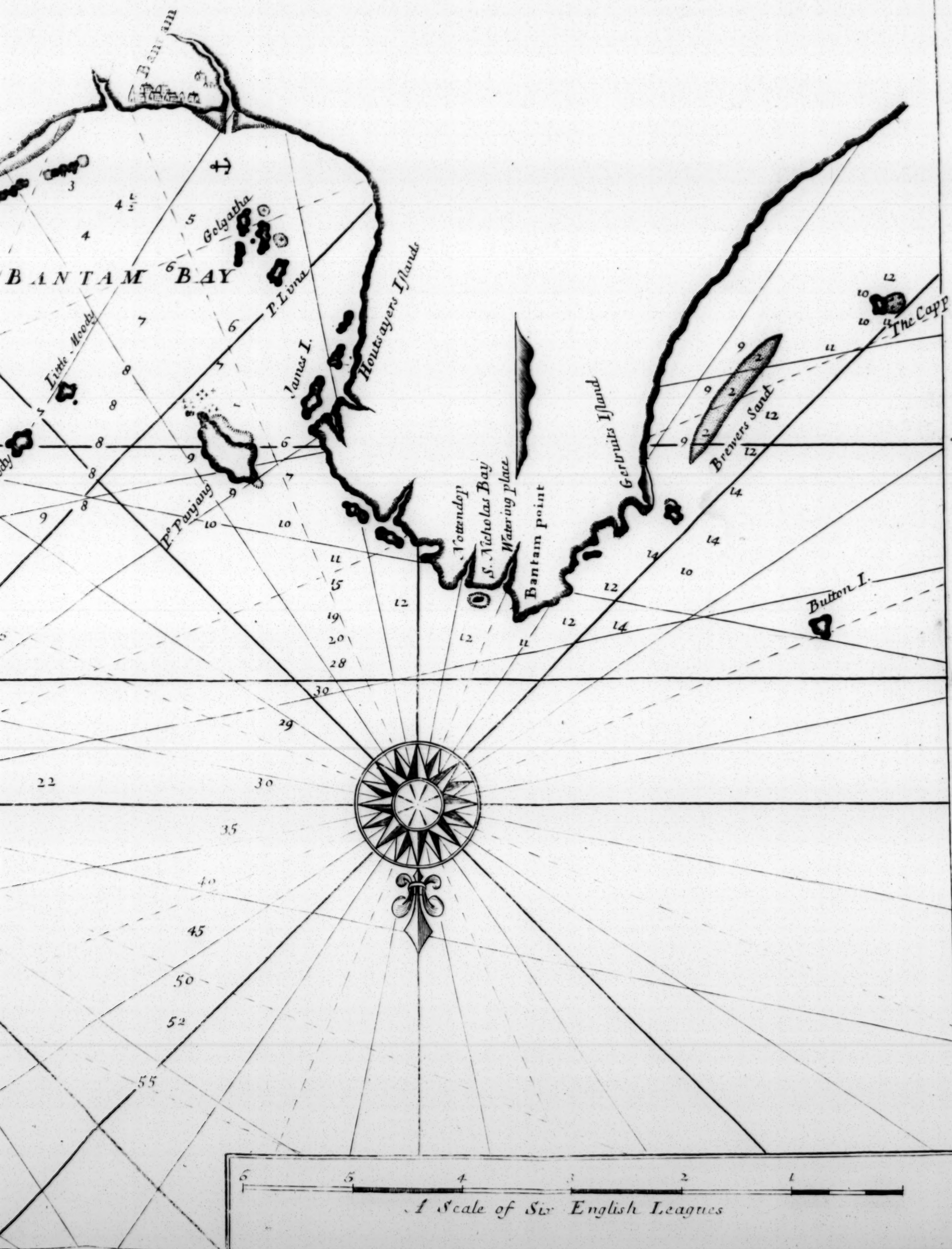
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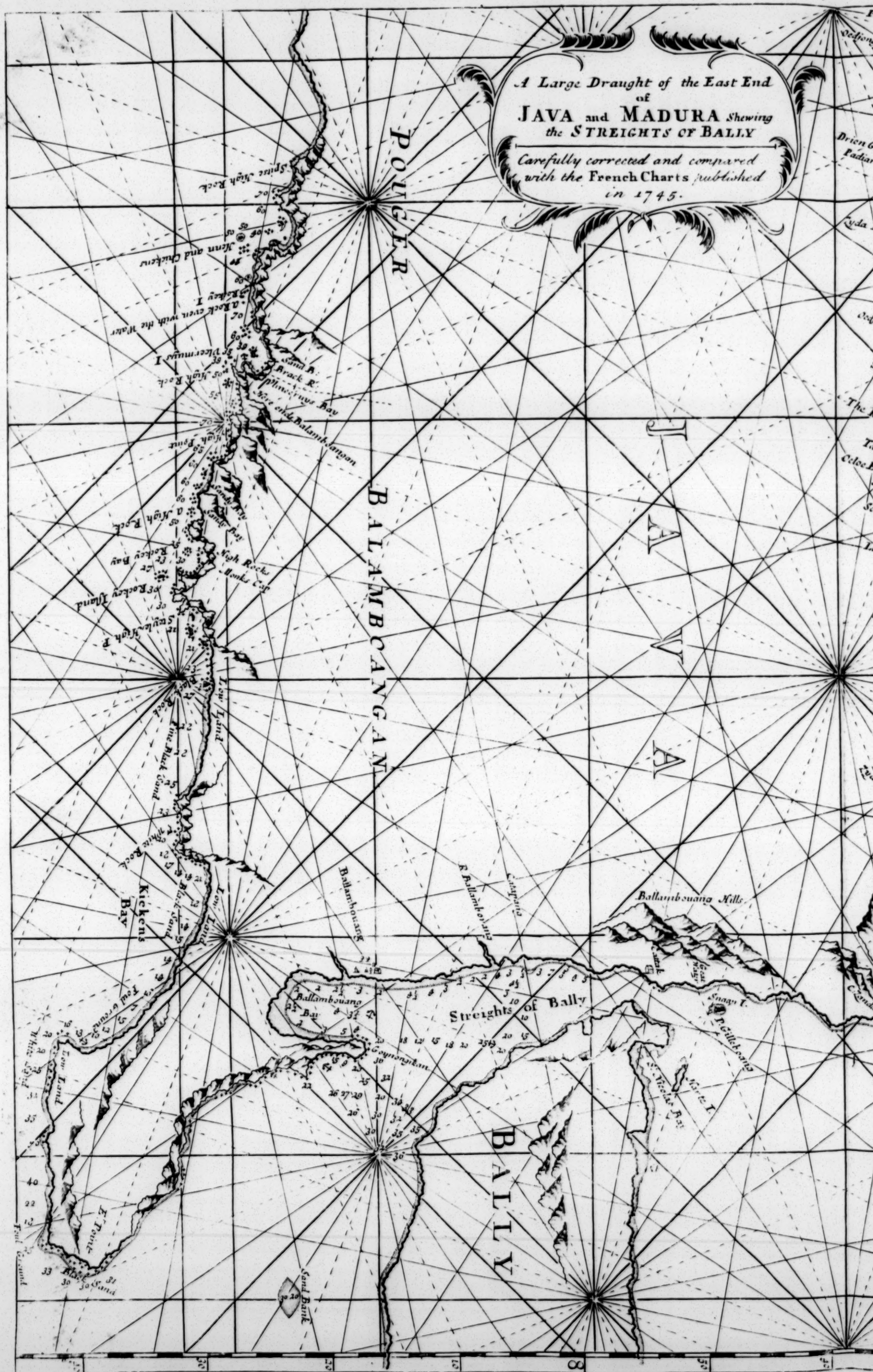
Bantam Hill

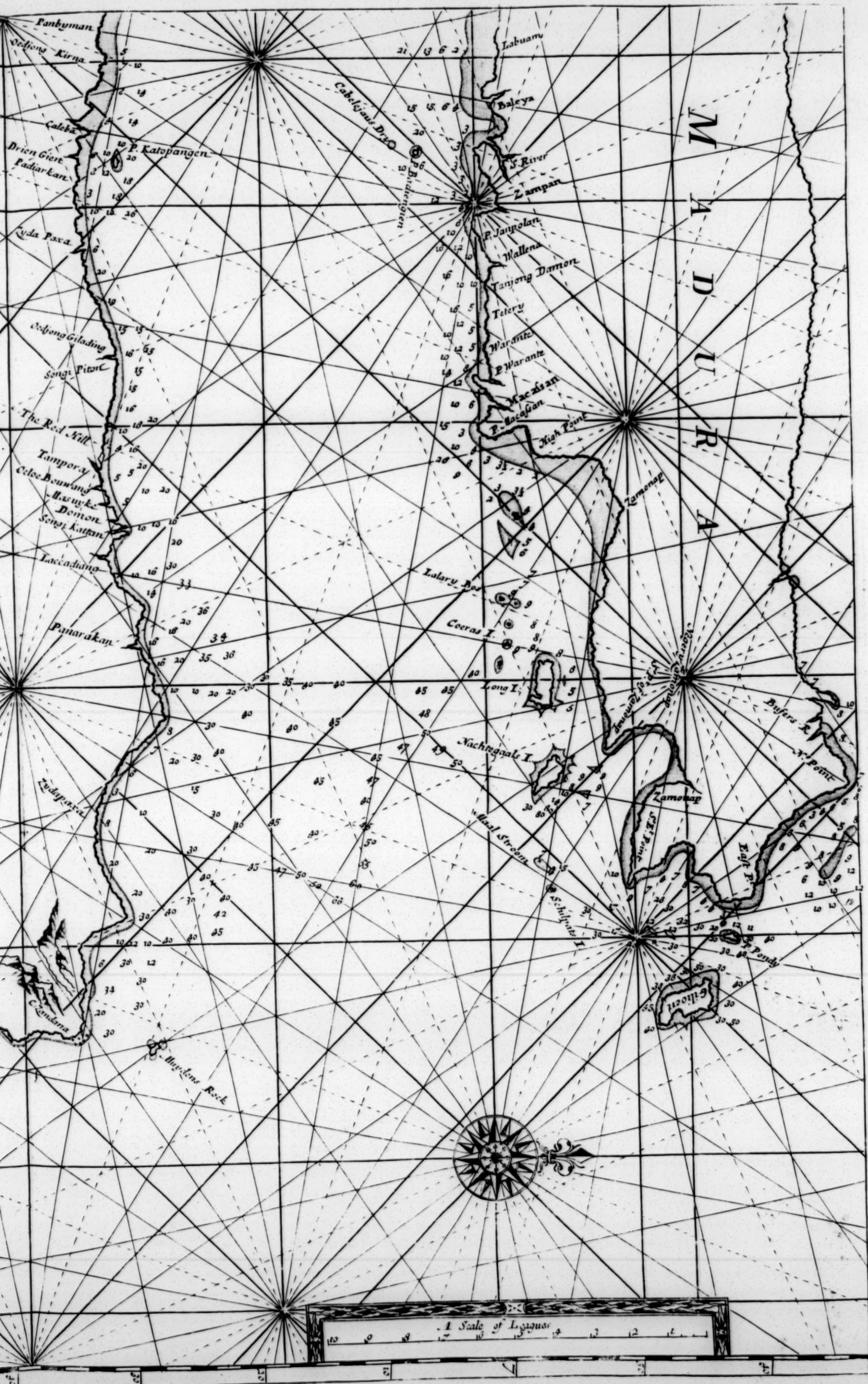
V

A



*Carefully corrected and compared
with the French Charts published
in 1745.*



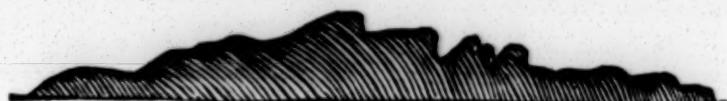


From *Pulo Parcelar* to *Rachado*, the Coast lies along South East half East 12 Leagues, you may sail within two Leagues of the Shore, but about four Leagues short of *Cape Rachado* there is a shoal, which in half a Glat's time, shoalens from twenty to nine Fathom, and sometimes there are Breakings on it. From *Cape Rachado* to *Malacca*, the Course is South East distant nine or ten Leagues, you may run within two or three Miles of the Shore and no danger, about three Leagues to the South Eastward of the Cape; on the North West side of *Malacca* Road, lieth a small Island full of Trees, which is called the *Wood-Island*; you may pass by it, within half a League, and then you will have the Town and Road open, and fair in sight; you may Anchor in what depth you please very safe, in five Fathom is the common place, but do not go too far to the Southward, for fear of Gusts out of the

North West, drawing you away on the foul Ground that lies off of the Island to the Southward; there is another Channel between the Sands and *Sumatra*, but it is uneven Soundings, and not thoroughly known.

Of sailing through the Streights of Diron from Malacca.

The Island of *Malacca* bearing East North East three Leagues off; from thence steer away East South East, and you will have 25 and 26 Fathom Water, which said Course keep till you bring *Malacca* Islands to bear NW. by N. about 15 Miles off, at which time *Cape Formosa* will bear E. by S. half S. 6 Leagues off, and appear in the Form following.



Cape Formosa, E. by S. half S. six Leagues off.

From hence direct your Course South East till you have brought *Crimon*, or *Carimon* the *Left* to bear South East by East, about 12 Leagues off.

S. 1 E.

S. E.

S.

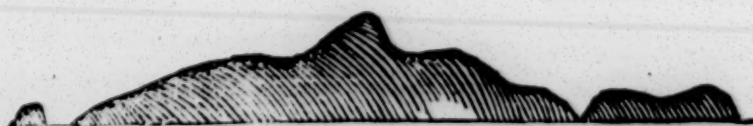
SE. 1 E.



Thus sheweth *Carimon*, bearing from the SE. half E. to the SE. half S. distant about 7 Leagues.

At which time *P. Pefang* will bear East by South half South; here you may chance to shoalen your Water to 6 or 7 Fathom, but keeping the aforesaid Course you will quickly deepen your Water to 22 and 23 Fathom, and if you keep the aforesaid Course from thence, you will shoalen your Water from 18 to 5 or 4 Fathom; where if it be Night, I would advise to Anchor, having *P. Pefang* East by North, and *Carimon* South East; you will not have less than 3 Fathom any where hereabouts. The Islands of *Carimon* lie close together and are very high, the Southermost is the highest; from thence direct your Course South East by East, till you bring *Crimon* or *Carimon* to bear South about five Leagues off, in which Passage, you will have 16, 15, 12, 11, 9, 7, and 6 Fathom; from hence direct your Course to double *Crimon* or *Carimon*; but if the Tide should happen to be against you, so that you cannot double *Crimon* you may come to an Anchor in 22 Fath. *P. Pefang* bearing North North West half West, and *Carimon* the *Left* South by East five Miles off; from hence steer away East and East South East to double *Carimon*, till you have brought it to bear West about two Miles off; from whence steer down the *Streights*, keeping between the depths of 12 and 16 Fathom oazy Ground, till you get sight of the shoal called the *Middle Ground*, which hath no break upon it; but there are two Rocks above Water, appearing like drifts, you have seven Fathom close by it; here runs a great Current, setting upon it, which in our soundings we found to be sharp Rocks; abreast of which about two Cable's lengths, had 15 Fathom; here are three Islands, between which and the shoal is the Channel, being about one Mile and a half broad, and when you have brought these three Islands each in other, then you are the length of this shoal, and being clear about three Quarters of a Mile, bring the shoal and *Little Carimon* in one, and you will open the *Twins*, where you may Anchor in 17 Fathom; having a large Island bearing North East half North shut in with a Gut to the Westward; here is another Rock bearing North North East from you, and about one Mile from the Island; from the aforesaid anchoring Place you stand down the *Streights* South East; in your Passage you will have sight of several Riplings appearing like shoals, but you will find the *Streights* very clear, except about three Quarters of a Mile off *Great Drions*, lieth a Rock like a Boat having foul Ground about it; if the Tide happen to be against you, you may Anchor in 16 Fathom Water, the *Twins* bearing North East by North, and the shoal North by West, from whence weigh with the Tide setting off the *Streights*, and stand away South East between two small Islands, and another

shoal on *Sabone* Island side, bearing West North West; the two Islands have Rocks and foul Ground about them; you may stand out between the two foul Islands and *P. Panteas*, and afterwards steer between *Little Drions* and the *Oyster Islands*, the Northernmost of which is very foul; and when you have brought *Carimon* the *Middle Ground*, and *foul Islands* directly in one, stand over towards *Drion Island*, in 12, 13, and 14 Fathom; afterwards tack, and Weather the little round Island that lieth in the Mouth of the Gut. Between this Island and the *Oyster Islands* is foul Ground and Breakers; also between the *Oyster Islands* are Breakers; and about half a Mile to the Westward of the *Oyster Islands* is a single Rock, appearing above Water; stand away South East, and South East by East, till you bring *Little Drions* to bear North West by North five Leagues; and the small round Island North North West, or you may continue your Course till you have brought *Lingin* to bear South East by South about seven Leagues distance; from whence stand away South by East, and South South East about ten Leagues; where, if there be occasion, you may Anchor in eleven Fathom hard clay Ground. From hence direct your Course South by East, and South South East in 11, 12 and 13 Fathom, till you have brought the two Peaks of *Lingin* East by North four Leagues and a half; where, if the Tide be spent, you may Anchor in 12 Fathom oazy Ground, the *Calentigas*, bearing South West by South one Mile and a half distant. From hence stand away South East by East, and South East, which Course continue till you have *P. Burella*, or *Farella*, in one with the Northernmost Point of the outermost Island, which bear from each other South East and North West; this outermost Island is foul Ground, between it and the other great Island are two or three Rocks perceivable above Water: Continue your Course South, and if the Tide be spent you may Anchor in 20 Fathom, oazy Ground, the *Calentigas* bearing North West by North; here you will find the Tide set strong upon *P. Farella*. From hence weigh with the Slack-water, and stand along Shore South South East, and you will discover the *Hog Point* upon your weather Bow, where is good Anchoring in fourteen Fathom, *Hog Point* bearing South South East distant six Miles. From thence make your Course good South South East, and South East by South, in 8, 9, and 10 Fathom, till you have brought *P. Thoupon* North East by North, distant by estimation, ten Leagues, and the High Land of *Batawang* on *Sumatra*, will bear South 10 or 11 Leagues. From hence steer away South East by East, and East South East, and you will discover the high Land of *Monopin*, appearing in the Form following.



Thus sheweth the High-land of *Monopin*, upon the Island of *Banca*, bearing North East.

O

Continu:

Continue the aforeaid Course more Southerly, in 7, 8, and 9 Fathom, till *Monopin* bears South East, and *Batacarang* South West; from whence stand in for *Sumatra* Shore, till you deepen your Water to 14 and 15 Fathom (to avoid aunken Rock which is called *Frederick Hendrick*, which lies much about midway, between the Head *Banca* and *Sumatra*, as by the Draft doth plainly appear. This Rock bears West South West, from the Westernmost Point of *Banca* about 8 or 10 Miles distance.) From hence, with the Tide under foot, continue your Course Southerly, till the High-land of *Monopin* bear North, and the fourth Point of *Sumatra* South East; here, if necessity require, you may Anchor in thirteen Fathom.

Instructions for sailing from Malacca thro' the Streights of Singapore.

To sail
down S.
Channel.

Bring the Westmost Island of *Malacca* West by North, six or six and a half Leagues, then steer South East, and that will carry you in the best of the Channel, in uneven Soundings when you are on the Sands side, you will have shoaler Water off *Sumatra*, but uneven Soundings on both, as twenty, ten, eighteen, twelve Fathom, continue your Course South East, and that will carry you fair by the Islands of *Auroi*, which are full of Trees, and low, except the Southernmost, there is deep Water about them, and to the Northward of them no Ground; be sure keep *Sumatra* fair on Board as soon as you are to the Northward of the said Islands, for the Stream runs strong to the Northward; when *Pulo Farachar* beareth East Southerly, you are to the Northward of the Sand. As to the Tides, no time can be reckoned, by reason of the Uncertainty of the Rains, which disembody themselves, which causes them sometimes longer than other; but this Note, That at the Island, to the Southward of *Malacca*, the Strength of the Tide of Flood sets to the North North West to the Northward of those Islands; and the Ebb sets to the South East to the Southward of those Islands.

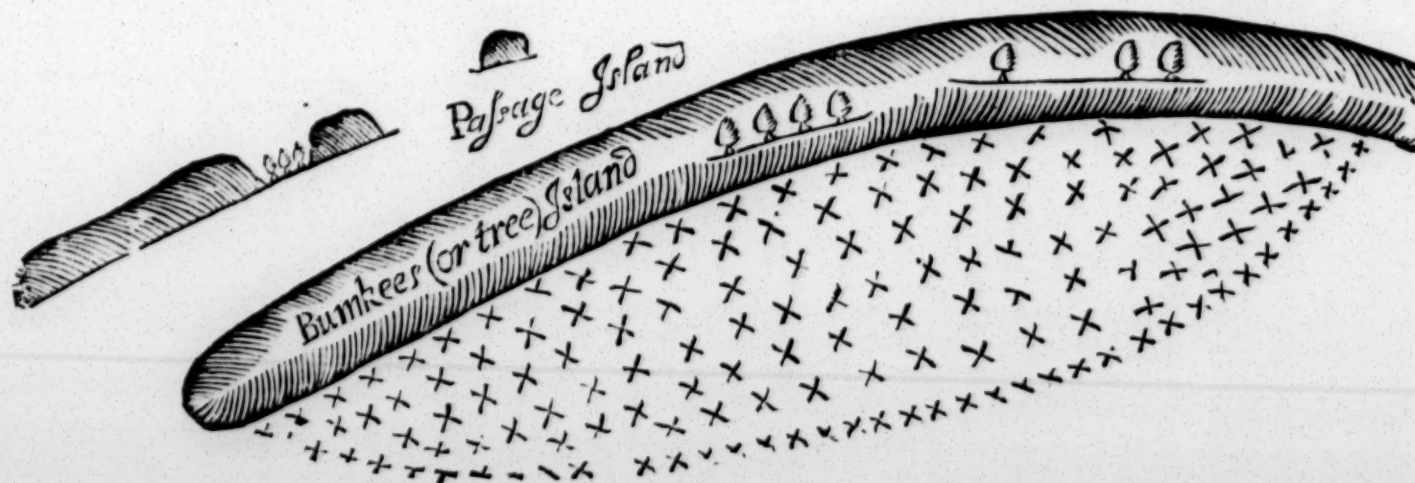
From the South Island of *Malacca* the Course is South East, Depth from twenty to twenty-eight, but the least Depth is twenty-two Fathom; you may pass within half a League of the South Isle, there being no danger; and when it bears from you North West half North, distant about six or seven Leagues, then the High-land of *Formosa* will bear East half South, about six or seven Leagues from you; then continue your Course South East till you come near *Formosa*, which give a Birth of about five Leagues, because there is many Shoals and Banks of Sand, and very uncertain Soundings from twenty to twelve Fathom, and then seventeen, and perhaps the next East ten.

The Course from the South Isle of *Malacca* to *Formosa* is nearest South East about ten Leagues, yet great Care must be taken you keep not too far to the South Westward; for four and a half or five Leagues to the West of *Pulo Pefang*, you will encounter with a Sand, on which it is but two Fathom and a half at low Water. The Channel to the Westward of it is very dangerous; when you have the first Soundings of this Sand, the high Peak of *Carimon* will bear South East and by East, and Point *Pefang* East and by North; The Tide runneth strong, and floweth two Fathom North West by West, and ebbleth South East and by East; but as to time it is uncertain, the Sand is steep too on both sides; but if it should so happen that a mistake is made, and you are in the Westward Channel, then you may run so far to the Southward till *Pulo*

Pefang beareth North East half East. You may haul away North and North by East, for the Channel next to *Pulo Pefang*, and have depth eight Fathom, then deepen to twenty Fathom; but be sure you haul no more to the Eastward than to bring the Body of *P. Pefang* North by East, and the North end of *Pulo Carimon* South East by East; then bring the Body of *Pulo Pefang* on the foreaid Bearings, for when the North End of *Pulo Carimon* beareth South East and by East, and the East End of *Pulo Pefang* beareth North North East, you will have but four Fathom and a half at half Flood, and in running one quarter of a Mile, you will deepen your Water to twenty Fathom, which I believe is a dangerous place; then you are in the Channel next to *Pulo Pefang*, and you may go within seven Fathom of the said Island, in the Channel is twenty Fathom, which hath been experienced; for the said Sand to the Westward of it is dangerous and steep too, and distant from *Pulo Pefang* four Leagues, but narrow, and the Channel to the Westward, not above four Miles and a half broad, and steep too on both sides, hard Ground on *Sumatra*, and oozy on the Sand-side. From *Formosa* to *Pulo Pefang* the Course is South East.

When the high Mount of *Formosa* bears North East and by North, depth sixteen Fathom, you will see *Pulo Pefang* just above Water, bearing East by South half South, and *Pulo Carimon* in two Mounts, bearing South South East half South; also you may see the Trees on *Sumatra* Shore; you may pass by *Pulo Pefang* in seven, eight, nine, and ten Fathom, but West by South, about seven Miles from the said Island, lies a Bank of Sand, but no less Water on it than seven Fathom.

Pulo Carimon lieth nearest South East by South, or South East half South, nine or ten Leagues distance from *Pulo Pefang*, being within three Miles of *Pulo Pefang*, which distance it is good to keep in; your Course is South East, the Tide runneth here South East by East, and North West by West, and floweth East by South, and West by North; but when you bring *Pulo Carimon* South West of you, then the Tide begins to set East North East, and North East, which if you are not careful, may carry you on a Sand that lieth between the *Narrow Streights* and the *Bomkees*, or *Tree-Island*, in this Sound the Tide parts and sets several ways; therefore, if it be in the Night, and dark Weather, the best way is to Anchor, (if not a stiff leading Gale) that you may in some measure, depend on your Course. When you are four Leagues past *Carimon*, you will raise two small Islands, called the *Two Brothers*, and when you bring them East two thirds South, about four Leagues, and just teen above Water, and the Point of *Carimon* West and by South a quarter South, then you will see the two East most Trees on the sandy Island that lies on the South-side of the Entrance of the *Great Streights*, bearing South East two thirds South about four Leagues; But the best and safest way is to bring the North-end of *Pulo Carimon* West, and the *Bomkees* or *Tree-Island* will bear East, distant from each other seven Leagues. Between them you will have Soundings from twenty to sixteen Fathom. When you have sight of the *Bomkees* or *Tree-Island*, run on by them in twelve, fourteen, sixteen Fathom, until the North Trees bear West by South, then *Passage Island* will bear East by North, and a small red Island, with two Heaps of Trees on it, South West three quarters South, which you leave on your Larboard side. Run fair by *Passage Island*, giving it a Birth of a quarter of a Mile, there being no more Danger than what you will see.



And in the Channel between the *Bomkees*, the Flood falleth West North West; and the Ebb East South East, and floweth North West; but to the Northward of the *Bomkees*, the Ebb falleth East North East in amongst the Islands, which you must take a great Care of, if not a stiff leading Wind. When *Passage Island* beareth North North East, you will see the Streights open before you. The Course to the *Two Brothers* is East by North, and E.N.E. distant five or six Leagues, very uneven Soundings from 17 to 20 Fathom, if it raineth not much, the Flood falleth from strong WNW. in upon the Shelves, that is between *Passage Island* and the *Two Brothers*, but this is uncertain in Case of Rains, run far within one Mile and a half of the *Two Brothers*, and from thence out along, your Course is East, and East by North, having uncertain Soundings; here you must have respect to your Tides, for they set variously; therefore if it be Calm, and dark Weather, it is best to come to an Anchor, when you have run so far out, that the high Land of *Bintang* bears SSW. off of which lies *Pedro Banko*, or *White Rock*, North North East, will carry you clear of the Sand that lies off

Jobore-head, or *Burbucet Point*, which Sand you must not borrow on Board of with your Lead, because it is steep too, as from twenty-three to ten, and to ashore, neither come under fourteen Fathom off of *Pedro Banko*; but for the better and fuller Understanding, take the following Directions.

Directions to sail into the Streights of Governadore, coming from the Northward.

It is much more safe to come in by your Marks, than by your Lead, for the Soundings of *Jobore Sand* is uneven, from twenty-three to ten, and to a Shore; and you must not keep nearer *Bintang* than fourteen Fathom, which depth you must have on *Bintang* file, before you haul up West and West by North; but the best way is to keep the high Land of *Bintang* South South West until *Jobore-hill* is West by North; then you will have depth 14 Fathom, and may haul into the Streights without fear; the Coast from *Jobore Sand* to the *Two Brothers*, is West half South when the high Land of *Bintang* bears South and West, it makes as the Figure underneath.

S. by W.



Thus sheweth the high Land of *Bintang*.

When you have the High-land of *Bintang* South East by East six or seven Leagues from you, you will raise the Islands that lie off of Point *Romano*, they lie about two Miles from the Point. I have passed seven times between them and the Cape, in a Channel, which had no less than three Fathom and a half; but the Soundings being uncertain, you had better go without, between them and *Pedro Banco*; you may pass by these Islands within half a League, and when you bring Point *Romano* North East by East four Miles and a half distance, then you will see *Pedro Banco* just above Water, being a *White Island* bearing East; and when you are shot pretty well to the Eastward of these Islands, hauling to the Northward, endeavouring to keep in seventeen Fathom, to get about the shoal that lies between the Islands; if you shoal your Water, haul to the Eastward again; and when you deepen haul to the Northward, endeavouring to keep in seventeen Fathom, it being a very good Channel to go about it, and being got about the shoal, steer away North by East; but when you judge your self to be short of *Pulo Aurore*, about nine or ten Leagues, haul off in 26 or 27 Fathom, be-

cause of a sunken Rock that lies off of Point *Aurore* about eight Leagues, and about three Leagues from *Pulo Tingey*.

If you are forced to stop at any of the Point *Tremoon* Islands, after you are to Northward of *Jobore Sand*, you may haul with them as you please, they being all high, and to be seen ten Leagues off.

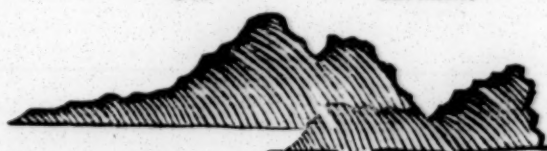
Directions for Sailing thro' the Old-Streights of Singapore.

When you are come so far down the Streights of *Malacca*, as the Islands of *Carimon*, and design to go through the Old Streights of *Singapore*, take the following Direction.

Carimon hath on it one high Peak, which is higher than any part of the Island, which Peak being kept open a small matter to the Southward of a low Point of double Land which sheweth in this form.

SW

Carimon.



You may steer directly for the Mouth of the Streights; your Course will be North East nearest; the Point on the North-side of the Streights hath two red Patches; if you keep near this Point you will have but four or five Fathom, but in keeping near the Southern Point, you will have seven and eight Fathom, which depth is the best of the Channel; on the North-side is a hard Sand Bank, stretching from the North Point to the Westward, about a Mile, and to the Southward half a Mile. The Land on this side is higher than the Land on the South-side, and is full of great Trees, which shew black; but the Trees on the South-side shew green, being *Mangroves*; on Occasion you may Anchor about a Mile from the Mouth of the Streights; from thence steer North East by East into the Streights, in depth eight and nine Fathom; and when you are entered the Streights, keep mid-Channel as near as you can; for on the South-side is a shoal stretching South West by West from the Island, at the Entrance into the Streights, which is dry at low Water; also on the North-side are small Ledges of Rocks dry at low Water; but in keeping mid-Channel you will find good Depths, as nine, eight, and seven Fathom, after you are shot between the Ledge of Rocks on the North-side, and the Shoal on the South-side, steer East North East, and you will have Soundings from fourteen to ten Fathom; keep over towards the first Point that is on the North-side; which Point hath two red Patches of Earth by the Water-side, and when you are

past the aforesaid Point, you will open the first Island; from hence you must steer East by North, and East, keeping still mid-Channel as near as you can, till you are past two Points more on the North-side, and you will find depth between ten and twelve Fathom, from hence your Course is East South East, and South East, as the Wind will permit, unto a small round Island, which you will see lying something more out into the Channel than the rest, borrowing as near unto it as you will, for on the Island side is the best Soundings; after you are past the Island you will have sight of a small Island with a white sandy Strand, bearing South East by South from the aforesaid round Island.

Here, if the Wind should happen to take you short, you may borrow on either side; on the Main, which is the North-side, in eight Fathom; and on the South-side, which is the Island side, in seven Fathom, where is good Anchoring in eleven Fathom; the white Island, with a sandy strand bearing South East by South, distant about three Miles: And the Point at the South-side of the Entrance of the Old Streights of *Singapore*, West North West, on the Main, which is the North-side lie two small Rocks in a Bay, the Westernmost of them will bear North East by East; about a Mile off, you have very good Soundings over to these Rocks, and four Fathom within a Ship's length of the side of them; upon each of them there groweth

eh a low bushy Tree. From the entrance of the *Streights* to this Island, the Land, on the North-side, hath several bluff Points, and several small Bays and Creeks; the South side is all flat Islands, full of Trees; when you depart from hence direct your Course for the aforesaid Island, with white strands; and in the way thither you will find 15, 14, 10, and 11 Fathom, and as you draw near this Island you will see a very fair and large opening into the Sea, but you must not regard it, for it is full of Rocks and broken Ground, and no Passage through it. Thro' this opening you will see the Island *Carimon*, and when the white Island bears West by South, the Island *Carimon* will be shut in with it, at which time you have 15 Fathom Water; and then the *Old Streights* will shew its opening quite through; steer over for the Mouth of the *Streights*, keeping the *Streights* quite open, your Soundings will be between sixteen and twelve Fathom Water, and the distance between the Mouth of the *Old Streights*, and the white Island is about six Miles: On the South side of the *Streights* is a bluff Rock and smooth aloft, with Trees, and Grass, and on the North side is a scragged Rock, shewing like a ruined Wall; also several other Rocks close to the Shore, or not above half a Ship's length into the Sea; the Passage is between these two Rocks which is not above half a Cable's length in width; but there is very good Soundings, the least depth being twelve Fathom, and when you have entered the *Streights*, you will find it something wider, it being there a Cable's length or more in width; as you enter into the *Streights*, you keep nearest the South Shore; but when you are within keep near the middle or nearest the North Shore, but not too near the first Point, for there is shoal rocky Ground. This is the narrowest part of the *Streights*, except the first Entrance; from hence you may direct your Course through as you please, for there is no Rock or shoal, but what lieth in the Bays, or within the Points, and in sailings through you will have ten and nine Fathom, the least depth being seven and a half, but in many places it is coarse Ground; after you are out of the *Streight*, you must steer East and East by South, depth 7, 8, and 9 Fathom; and being clear of the bluff Point, on the Larboard-side, you must lift up to the Southward, and in steering ESE. you will come in 7, 6 and 4 Fathom Water, in which depth you may Anchor; it is coarse sandy Ground, which is on the shoal

that lieth on South side of the white sandy Bay; this Bay trendeth from the bluff brown Hill on the South side of the *Streights*; and on the South-side of this Bay is a green Plot of Trees, which grow in the Water; and from that Point this shoal stretches East into the Sea, about a Mile, and from the North Point, which is a flat Point, with low green Trees, there is a ledge of Rocks, which stretch nearest South, about half a Mile into the Sea, so that I would advise those that come this way, not to come in less than seven Fathom Water; from the Mouth of the *Streights* towards the sandy Bay before mentioned, and at an Anchor, you will have these Bearings, the bluff Point at the Mouth of the *Streights* on the South-side, West a quarter North, distant about half a Mile; the low Point of green Trees, from whence the Ledge of Rocks stretches NE. three quarters E. and a bluff Point of the Main to the Eastward, East North East a quarter East; the Land to the Southward of this Point makes like Islands; between these Islands and the aforesaid, is the Mouth of the River *Johore*.

Directions for sailing in the Eastern Seas, from Pulo Tingay to the Bay of Siam, and as far to the Northward as Amoye in China.

Pulo Tingay is very high Land, with a Peak upon it, without a Saddle; round about this Island lies several Islands and Rocks, therefore it is best to keep nearest to *Pulo Auroe*, the Course from *Pulo Tingay*, to *Pulo Auroe* is ENE. 20 Miles; *Pulo Auroe* is an Island that may very well be known from the others, from the N. Point of it lie another close aboard the Shore, and also another, but that lies on the NW. side; and the lesser on the E. side, all overgrown with Trees. *Pulo Auroe* is high Land, when it bears SE. or NE. off you, it makes with a Saddle in the middle, and highest upon both Points, but when it bears SE. or NW. it makes highest in the middle without any Saddle; from *Pulo Auroe* to *Pulo Pejang*, your Course is NW. half W. 9 or 10 Miles distance, and indifferent high; you may fail between these Islands without fearing any thing, but what is visible before your Eyes.

Pulo Tingay.

Pulo Auroe.

The course & dist. from *Pulo Auroe* to *Pulo Pejang*, from thence to the middle of *Pulo Teymoan* and from *Pulo Teymoan* to *Pulo Capas*.

S.S.W.

SW. by S.



Thus sheweth the Island *Pulo Timoan*, eight Leagues off.

On the South end is a Bay, with a Town being inhabited; in which Bay is good Anchor-ground, where is good Water and Necessaries to be had.

From Pulo Timoan to Siam River.

Being pass'd *Pulo Timoan* you must steer a North West by North Course, to sail between *Pulo Capas*, and *Pulo Redang*: *Pulo Capas* is a high Island, lying in the Latitude of 4 deg. 57 min. North.

From *Pulo Capas* to the *Redang* Island.



When *Pulo Capas* bears North half Westerly about eight Leagues off it sheweth thus.

Being past the Island, you may direct your Course within the Islands of *Pulo Redang*, in the Soundings of sixteen, fifteen, eighteen, and seventeen Fathom close on board the Shore; the Islands of *Redang* are all high Islands, being five in Number, besides some high Rocks, the Northernmost lieth in the Latitude of five degrees, and in the fashion of a *Sugar Loaf*, and is called by the *Dutch*, *Casson de Hava*, that is as much as to say *Maiden Paps*.

Being past the *Redang* Islands keep the Main on Board as far as *Patany*, in sixteen or seventeen Fathom, and when past *Patany*, keep the Main on Board.



Thus sheweth the High-land of *Patany*, bearing South West by West 4 Leag. off.

Keep in ten and eleven Fathom, till you come in sight of *Legore*, then between *Pulo Claise*, in fifteen, fourteen and sixteen Fathom; this *Pulo Claise*, or *Cara*, are three Islands, the Northernmost is the greatest; they lie S. and N. close by one another; from hence steer North North West, as near the West Land as you can possible. You may run with your Ship to the Eastward of the Islands, to ten degrees North, but with Junks, it is best to keep within them, for more certainty of *Legore* Road, which lies in ten degrees twenty minutes North, (to the Bight of *Carnom*) where the Bight of *Legore* begins.

Note, That *Carnom* Point, or *Tarnon* Point, is a high Point near the Sea-side, in the Latitude of eight degrees fifty minutes, from whence your Course is North, and North by West; thirty two Miles from the Point lies the Point *Jusse*, where is many Rocks, or small Islands; here the Land stretches more Westerly; you may steer either without or within the Island *Carnom*, if you run without these Islands you must steer North East half North as far as the Southernmost Island; and so far as the North end of the Northernmost, which is high; the Course from one to another

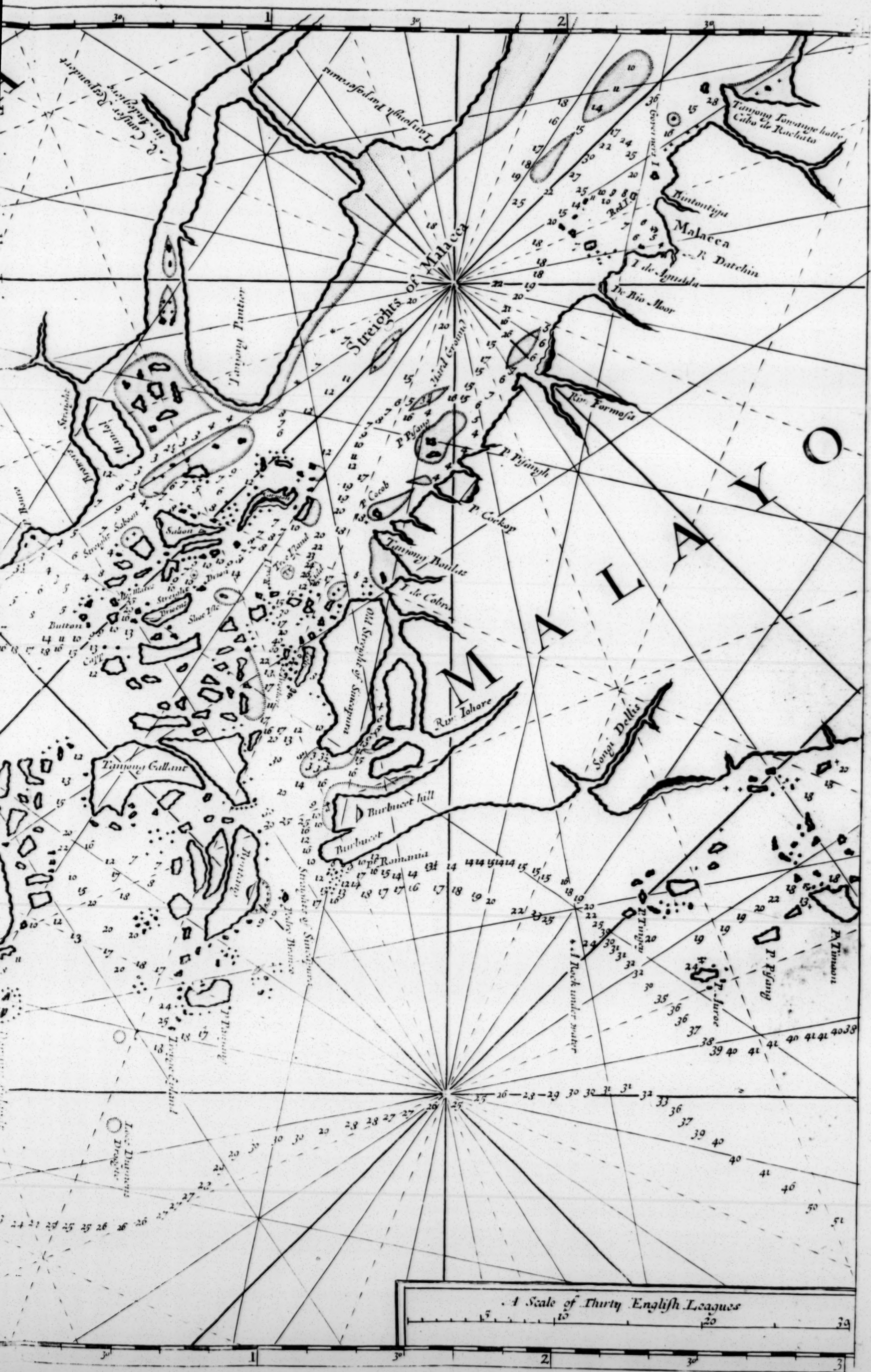
Carnom Point.

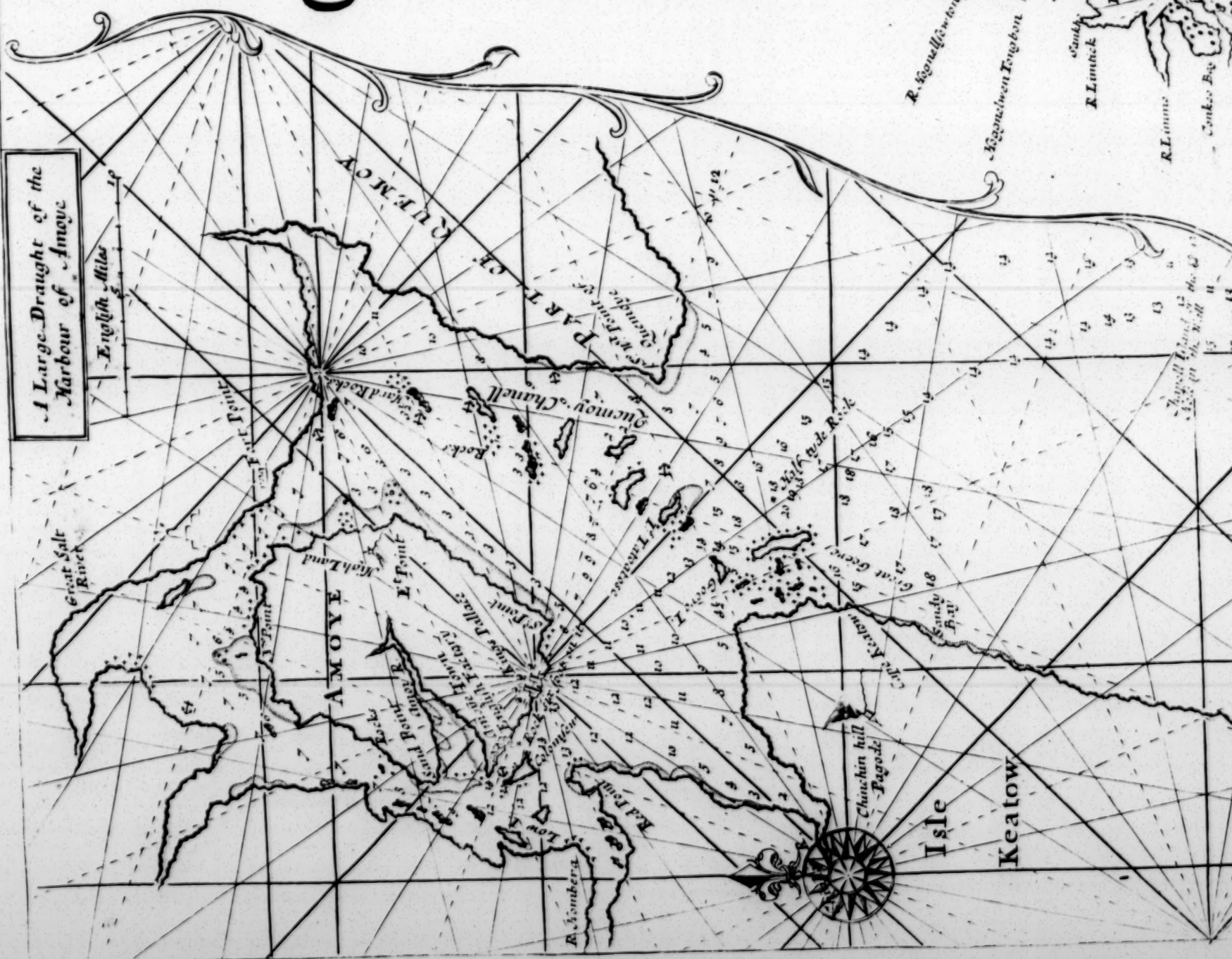
Mip Room Cat.

37

A
Large Chart
Describing the Straights
of
MALACCA AND SINGAPORE
Carefully corrected and compared
with the French Charts Published
in 1745.

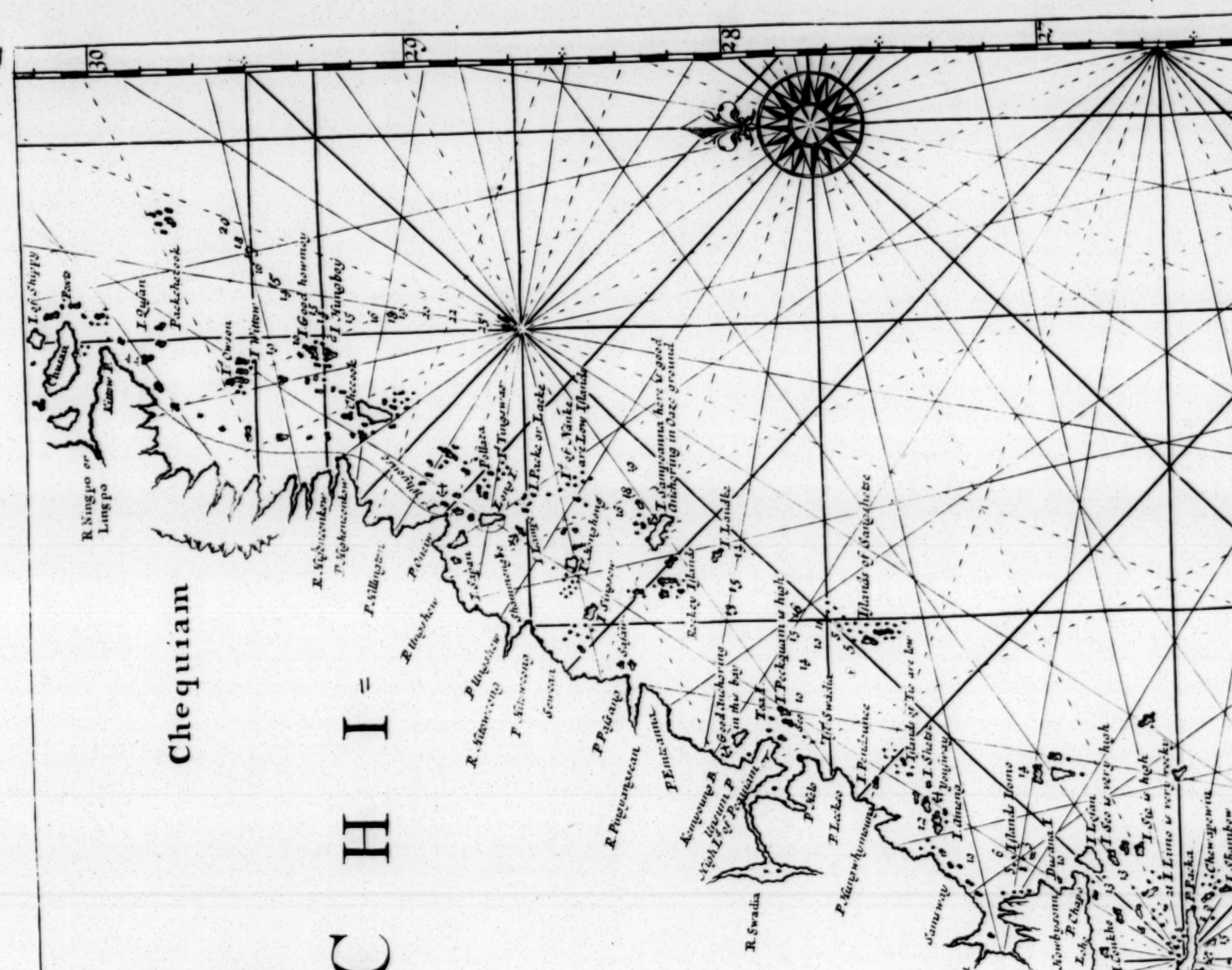






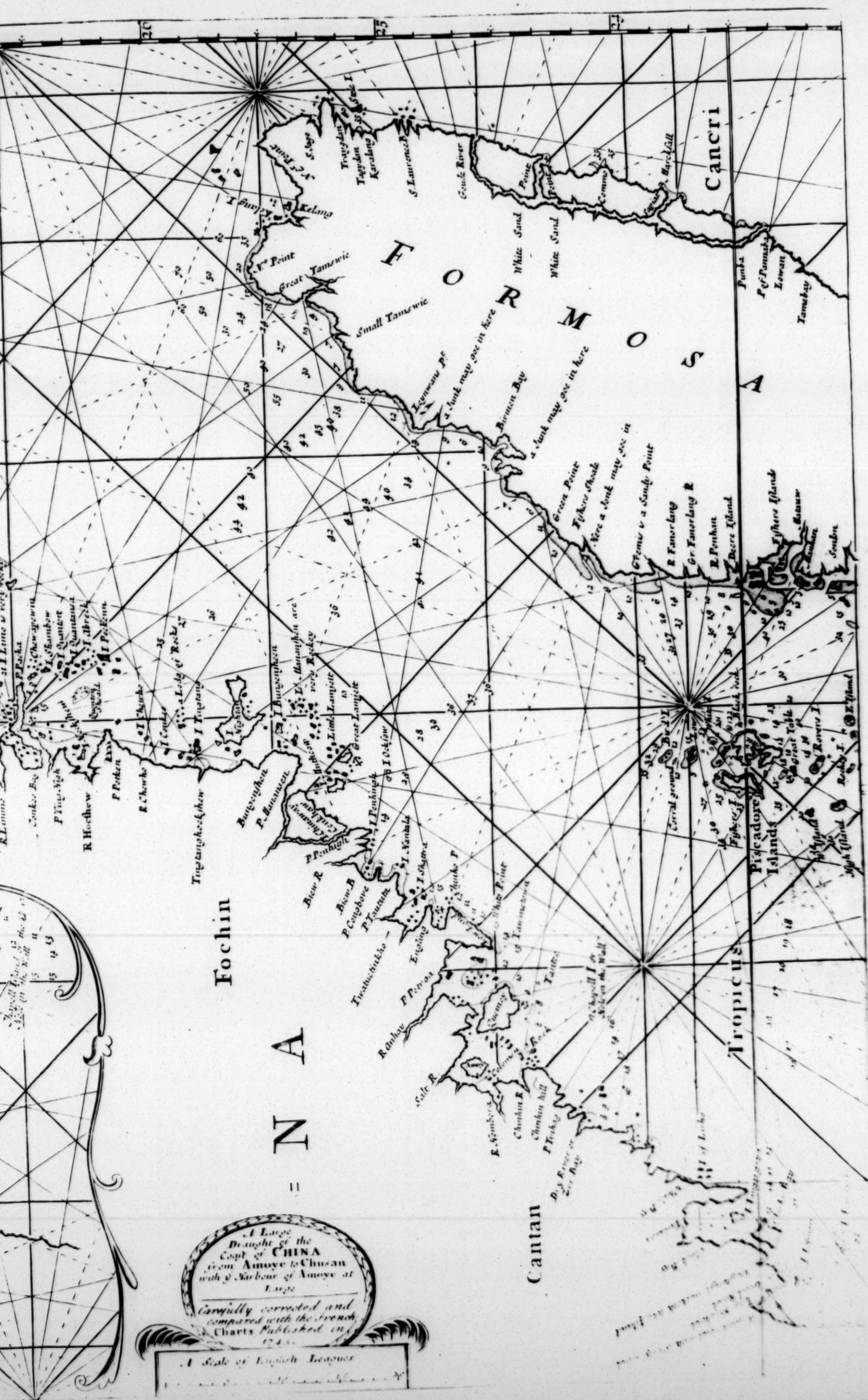
A Large Draught of the Harbour of Amoy

English Miles



Chequiam

C H I =



another is North West fifteen Miles; the Southermost lieth in the Latitude of ten Degrees, where you may find all sorts of Fire-Wood, Timber and good fresh Water.

Those that desire to anchor in *Peppy Road*, in the Bay of *Siam*, may ride in three, four, or five Fathom, according to the Draught of the Ship; observing that to the Sounding of *Peppy* lies a flat Point of Land, which stretches a shoal twelve or thirteen Miles to the Oiling; from this Flat the Course stretches North, then North West, as far as the River *Mokalonga*, where the Land makes in a Bight, from whence the Land stretches more Westerly towards the River of *Siam*.

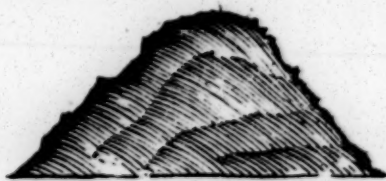
Lying before the River of *Peppy* in four Fathom you have these Bearings, the fore-mentioned Island South East, the Mouth of the River West by South, as also a small round Hill to the Northward of the River in the Low Land.

Directions from the River of Siam to the River Cambodia, in June, July or August.

Now coming from the River of *Siam*, in the fore-mentioned Months, endeavour at first to keep the West Coast on Board, then endeavour, as the Wind and Weather will permit, to get about the North Point of *Siam*, because of the strong Sea Breezes that blows there at this Time of the Year; in fine, the best way will be to keep the West Shore on Board as far as *Cui Point*, from whence you may steer boldly South East, for, without doubt, the farther you get to the Southward, the larger you will have the Winds; and therefore you need not despair, altho' you could fetch *Cui Point*, but may be bold to steer away South East for *Pulo Panjang*, which is a flat Island on the top, and hath several small Islands about it. About this Island is thirty Fathom; being past this Island, steer away South

East for *Pulo Uby* in sixteen, seventeen, eighteen, and nineteen Fathom. Those that are desirous to sail to the River of *Cambodia* from *Siam*, *Bantan*, *Batavia*, or any of those Parts, must needs get sight of *Pulo Uby*, for without making it, you will steer but a bad Course, by reason of the strong South West Winds that blow very hard in the Months of *June*, *July*, and *August*, and in this Time of the Year you have much Rain, Thunder and Lightning, and great Overfalls of Wind, with dark dirty Weather; so that you will scarce get an Observation; they that intend to sail into the River, must be very well furnished with Anchors and Cables, and a thousand Fathom warp, because you must warp against the Current at least one hundred and eighty Miles, to run in sight of *Pulo Uby*; coming from the Westward, come no nearer it than sixteen Fathom, and you will without question, get sight of it, but being in twenty-nine, twenty-seven, and twenty-five Fathom, you are a great way to the Westward; it is an Island well to be known from the others, and maketh like Hommocks and Saddles; coming from the Southward, these Hommocks bear South West, and North East one of another, whereof the Southermost is the highest, and the others much less, and the Northermost lowest. When *Pulo Uby* bears North of you, it seems to be one round Hill.

Pulo Uby is about forty Leagues to the Westward of *Pulo Condore*; it lies just at the Entrance of the Bay of *Siam*, at the South East Point that makes the Bay, namely the Point of *Cambodia*. This Island is about seven or eight Leagues round, and is higher Land than any of *Pulo Condore* Islands; against the South East Part of it, there is a small Key about a Cable's length from the Main Island. Also *Pulo Uby* is very Woody, and it hath Water on the North-side, where you may Anchor, but the best Anchoring is on the East-side against a small Bay, then you will have the little Island to the Southward of you.



Thus sheweth *Pulo Uby*, when it bears East North East, about three Leagues off.

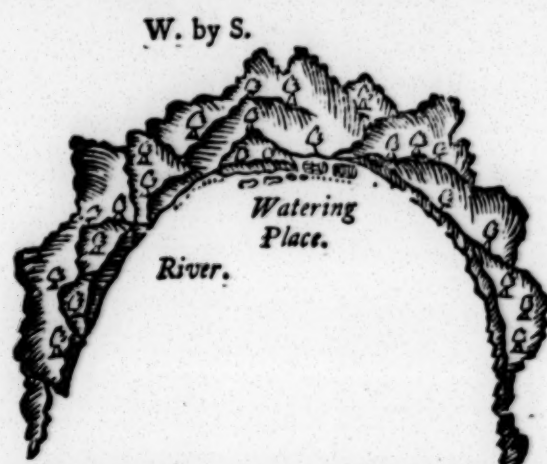
When you depart from *Pulo Uby* towards *Pulo Condore*, and bring *Pulo Uby* to bear North West by North, about six Leagues off, you will have eighteen Fathom Oazy Ground, and a strong Current that sets to the South South East; at this distance you will see the small Island that lies from the East-end of *Pulo Uby*; you may sail between them without Danger.

And having doubled the Southmost Point in fifteen or sixteen Fathom, you will begin to make *Cambodia Point* in the North West of you, which is low Land, with some high Trees, from whence steer directly North, to make the Land of *Cambodia*, continually keeping your Lead going, where about sixteen Miles from the Main, you will find a Bank of hard sandy Ground, upon the shoalest of which Bank is three Fathom, but you need not fear but steer directly North, and in a short time you will deepen your Water from three Fathom Sand to five or six, and so proceed till it shoalens to four, and you will doubtless fall in with the River, which on both sides hath higher Trees than any on the Coast. This River bears South West by West, and West South West from *Cambodia River*, about sixty-eight Miles distance, from whence steer away East North East twenty-four Miles, in

three and four Fathom, and you will meet with another, though smaller River, and shoaler; from this River the Land stretches East forty-two Miles to *Cambodia River*; being there run in into 3 Fathom for the Land, which here is not well to be made, but by the Bearings of it, which is higher than *Osten out rult*, by which you may assure yourself to be before the River *Cambodia*, then you will see two Points and an Island that lies in the mid-Channel; in the Mouth of the first opening lies the two Shoals which makes three Channels, the Westermost is called the River *Cassaba*, the next is between both the Shoals, where at High-water, you will have fourteen or fifteen Foot hard sandy Ground; but in the Eastermost Channel you will have three Fathom at Spring-Tides, and in some Places oazy Ground, those that intend to run in between both the Shoals must steer North, and North by West, close by the West Point, where you will meet with deep Water, as thirty-four, thirty-five, or thirty-six Fathom, and leaving two Islands on the Starboard-side, keeping along the West-side until you are one hundred forty-four Miles up the River, where you leave a River on the Larboard-side, and then you will meet with *Muscet-boles*, from whence you must keep still on Board the West-side until you are before the City.

Instructions to sail in the South Monsoons from Pulo Timoan towards Pulo Condore, and as far to the Northward as Amoye in China.

A Draught of the Bay, or Harbour of PULO TIMOAN.



Pulo Timoan lies in the Latitude of 2 degrees 50 minutes North, and its the greatest of all the neighbouring Islands, and so high that you seldom see the Top, by reason of the Fogs and Mists that lie upon it; upon this Island is a convenient Place to Water, as well on the East-side as on the West, likewise clear Ground round about, for Ships to Anchor, and on the East-side is good Roads for Westerly Winds; by the South Point of the Island, lies a small Island, and another by the North Point, and you have, in the mid-Channel, between *Pulo Auroe* and *Pulo Timoan* thirty and forty Fathom, coarse Sand; the Variation between *Pulo Timoan* and *Pulo Condore* is 2 degrees 00 minutes Westerly, and Course North North East, a quarter East, distant 127 Leagues, having these Soundings, viz. twenty-two and twenty-four Miles from *Pulo Timoan*, is thirty-three and thirty-four Fathom oazy; being in 4 Degrees North Latitude, is forty-three and forty-four Fathom coarse Sand; eighty Miles more Northerly is forty Fathom, then from 5 degrees 30 minutes it shoalens gradually to thirty-nine and thirty-eight Fathom; in 6 Degrees, is 35 and 36; in 7 Degrees, 40 or 50 Minutes, is twenty-four and twenty-five Fathom, oazy Ground; when you are in twenty-four Fathom, and if the Weather be clear, you will begin to get sight of *Pulo Condore*, lying in 8 degrees 40 Minutes North Latitude; coming in 20 and 22 Fathom, you will have a very fair sight of it, about twenty Miles North of you, and then you begin to get Soundings, of a grey Sand, mixt with Shells, and the Water looks thick.

Note. That in thick and dark Weather, you may judge by your Soundings whereabouts you are; this Island, coming from the Northward, or the Southward, makes high, hilly, and broken scraggy Land, having, by the North East Point, a high Rock, which makes at a distance like a Sail, round about it is clear Ground, so that you may run either within or without; about twenty-eight Miles West North West from it lies two small Islands, about four Miles distance one from the other, which coming from the Northward, or the Southward, you may leave on either side of you, but to run between them is needless, because there is thirteen and fourteen Fathom, a Mile without them.

Pulo Condore lieth in Latitude, as is said before, 8 degrees 40 minutes North, and South by East from the River of *Cambodia* about 20 Leagues. *Pulo Condore* is an Island, or rather a Heap of Islands, of which *Condore* is the chief, and the only one inhabited; you Anchor on the North-side against a sandy Bay two Miles from the Shore, in four or five Fathom. *Pulo Condore* is about fifteen Miles long, and stretches East and West, and may be seen ten or twelve Leagues at Sea: there is another pretty large Island about three Miles long, and half a Mile broad. This Island stretches North West and South East, and is so conveniently seated at the South-end of *Pulo Condore*, that between them is formed a very good Harbour; the Entrance is on the North-side, where these two Islands are near a Mile asunder; towards the South-end of the Harbour the two Islands meet almost, there being only a small Passage for Boats.



Thus sheweth *Pulo Condore*, bearing South, distance eight Leagues.

North East, half East one hundred and eighty Miles from *Pulo Condore*, and forty Miles to the Offing of the Coast of *Siam*, lies the Island of *Cecier de Mar*; this Island is long and stretches South West and North East, about six Miles; it is barren, and of a yellowish Colour, having in the middle a Coney Hill, and on the South-side an Hommocky-back; about two Miles and a half from the North West Point, or side of *Pulo Cecier de Mar*, lies a Rock; and a Cannon-shot from the North East Point is a red rocky Island, with small Rocks about it, some above Water, and some under; from which Rock there stretches a small Spit of Sand to the Offing.

About twenty Miles distance from *Pulo Cecier de Mar*, on an East Course, lies an Island, and East North East

from thence lies another, between which two there is foul Ground; and from the South-side of the Westernmost of these two there stretches a Ledge of Rocks to the Offing. Directly South from *Pulo Cecier de Mar*, forty-eight Miles, lies the Westernmost of *Joney Hatch Wizbel* Island, they be three in Number, Latitude 10 deg. 28 min Meridian Distance from *Pulo Condore* 140 Miles, about which you have no Soundings, the Easternmost is high and round, and very steep from the Sea-side; and about two Miles off the West-side lies a Rock above Water, and about two Miles from the South West-side, lies another level with the Water.



Joncatwicks Islands, bearing W by S. 3 Leagues.

Joncatwicks Islands, bearing West 2 Leagues.

South South East from *Joney Hatch Wizbze* Islands, and about eighty-two or eighty-four Miles distant lies a Reef called *Middleburgh* Shoal, and forty-eight Miles to the Eastward of *Joney Hatch Wizbze*, in the Latitude of 10 deg. 55 min. North, lies *Prinsens Clippen*, and North North West from *Pulo Cecier de Mar*, about seventeen or eighteen Miles distant lies the Hoof *Van Hollands* Shoals, which is a large rocky Reef, and lies also twenty-eight Miles South East by South from *Steen Clippen* Island; upon the shoalest part of which is three and a half, four, and four and a half Fathom, which is on the North-side, but come no nearer, coming from the Northward, than fifteen Fathom sandy Ground; for coming nearer, you will have hard sandy Ground and Shells, in the mid-Channel; between the Hoof of *Van Hollands*, and *Abers Lotes* Shoals, there is twenty-three or twenty-four Fathom sandy Ground, mixt sometimes with Shells and small Stones. About ninety-five or a hundred Miles North East from *Pulo Condore*, and thirty-six to the Eastward of *Crab* Islands, that lie before the River *Cambodia*, lies a Shoal which was discover'd by a *Dutch* Fly-Boat, called the *Elbough*, upon which was found thirteen Fathom, which you ought to take notice of, not so much for fear of any Danger, as the right judging of your Distance.

Between *Pulo Condore* and *Abers Lotes* Shoals, you will find Soundings from twenty three to twenty-seven Fathom sandy Ground; *Sinuell Janquis* Point lies in the Latitude of 10 deg. and 36 min. North, and about thirty Miles to the Northward of the River of *Cambodia*, and is high Land, which is to be seen thirty or thirty two Miles off; all Ships that intend to run between *Abers Lotes* and the Main, coming from the Southward, commonly run in Sight of it. You may run as near the Point as you please in five or six Fathom, where you will find a Road for Northerly Winds, and good fresh Water and Provisions may be bought of the Inhabitants for Money: Not far distant from this Point lies a small Island to the North Eastward of this Island, as far as the second Point, and so to the Sand Hills there is fair sandy Islands; from the afore-mentioned Sand Hills the Land stretches North East by East about twenty Miles, along with *Deckerforeland*, as far as *Sattinbuigh*, which lies in the Latitude of ten and fifty. About South by West, two or three Miles distant from *Sattinbuigh*, lies a small round Island called *Toppersboite*. From *Sinuell Jaques* Point to this Island, in about three or four Miles to the Offing, you will find Soundings of seven or eight Fathom sandy Ground.

About seven or eight Miles from *Toppersboite* in the Offing, about ten Miles from the Main lies *Abers Lotes* Shoals, which is in the Latitude of 10 deg. 40 min. the greater part of it is Rocks; but your best way is to run without it, borrowing no nearer it than fifteen Fathom; but if you intend to run within it, come no nearer the Main than four or five Fathom, and no nearer the Shoals than eleven or twelve Fathom, it lying in fourteen Fathom, therefore endeavour what you can to keep in eight or ten Fathom.

Coming from *Pulo Cecier de Mar* towards *Steen Clippen* Island, you will find your shoalings from twenty-five to twelve Fathom for the most part, and red sandy Ground, and then you are about Cannon-shot without *Steen Clippen* Island (which makes very barren and full of Rocks, lying near the great Sand Point, upon the Coast of *Tiomp*, which Point, coming from the Northward, makes like an Island, and hath several white sandy Spots upon it; by which sandy Spots and this Island, the Point may be known from any other) you cannot fail between this Island and the Main, because of several Shelves, Shoals, and Rocks, that standeth up like Pillars of a ruined City, and in the middle like a square Steeple. East North East, twenty Miles distance from *Steen Clippen* Island, lies *Pulo Cecier de Terra*, about five Miles to the Offing of the said high Cape *Cecier*, and lies in Latitude of 11 deg. 10 min. North, the Land making low and barren, the Road is rocky, in the middle is sharp steep Rocks, within and without the Island lies several Rocks under Water, therefore keep two or three Miles off, and come no nearer than eight or nine Fathom coarse sandy Ground.

Between this Island and the *Steen Clippen* Island, lies a great Bay called *Cecier* Bay, which stretcheth thirteen or

fourteen Miles North North East, as far as the River *Borden*, where you may buy all manner of Provisions for Money, and *Negroes* Clouts. At the South West Point of the Bay, and about five Miles to the Northward of the sandy Point, is a good Watering-place; when this Bay *Cecier* bears West by North half North twenty Miles distant you will see on the North-side, two or three small Hills resembling Sugar-Loaves, and on the South-side a long Sand, stretching, as it were, along the Shore to the South Point, which is the Sand Point, by which the Bay may be known from others. Not far from Cape *Cecier* lies a dangerous Reef, called *Bredas* Shoals, stretching itself to Seaward, from *Pulo Cecier de Terra*, whose South West Point, according to the Draughts, bears North East by East, from the *Steen Clippen* Island, which is not to be believed; because, as it is said before, *Steen Clippen* Island and *Pulo Cecier* lies East North East one from the other, which is a Point more Easterly, and then this Point, or Reef, should be either upon the Main, or within the Point; but it is rather to be believed, that the South West Point bears East North East from the afore-mentioned Island; and that agrees best with the Journals of the most experienced Pilots, likewise the Land lies a Point more Easterly, than it is laid down in the Draughts; you may conveniently sail by this Reef, in nine or ten Miles Offing, but if you come nearer, you will meet with shoal Water, and foul Ground, between the Hoof *Van Hollands*, and *Abers Lotes* Shoals, in twenty-one and twenty-two Fathom, you are about thirteen or fourteen Miles from the Shore, and if from hence you steer away North East and North East by North, you will find the Water to shoalen to fifteen and twelve Fathom sandy Ground, with some Stones, at which time you may assure your self, that the *Steen Clippen* Islands bear North West of you; proceed upon that Course, and it will deepen again to eighteen Fathom, and that before the Bay *Cecier*, and so to twenty four Fathom off *Cecier de Terra*, about twelve Miles distance, sometimes Sand, and sometimes stony Soundings. From the inside of *Abers Lotes* Shoals to the *Steen Clippen* Island, you have Soundings of ten and nine Fathom, and then you are about five Miles from the Main. From this Island to *Pulo Cecier de Terra*, you will deepen your Water at first, from nine to ten, from ten to fourteen and fifteen Fathom, then shoal again to ten, nine, eight, and within the Bay *Cecier*, to six Fathom. *Padaran* Bay lies in the Latitude of 11 degrees 15 minutes North, North Eastward from *Pulo Cecier de Terra* thirty or thirty-two Miles. Farther on the same Course, lies Cape *Avarillo Falso*, in the Latitude of 11 degrees 40 minutes North, which makes high with a Rock standing on the Top, much like the Watch of a Centinel House, and close by that Hill, a sandy Valley. About sixteen Miles from Cape *Avarillo de Falso*, lies the foul Bay, which stretches North by West, in whose Mouth lies a foul Island.

And to the Northward of the Cape is the Bay *Cemerin*, it runs in North West by West, in which, when you come, you find forty, thirty-five, and thirty Fathom; on the North West side, is rocky and full of Shoals, the Land hereabouts makes double and full of Hills, with many Points and Bays: about twenty-seven or twenty-eight Miles North North East from Cape *Avarillo Falso*, lies the South Point of the Western Bay, to the Southward of which you will see two white Spots; by which the Bay may be known from others, also several Islands near it, whereof the Island *Roden Holme* is the most remarkable, lying near the North End of the Bay, and makes bare and barren; being near this Bay, you will see to the Westward a Hill, which in clear Weather, resembles Cape *Avarillo*, but it lies more Southerly, and is much higher, and is commonly overcast with Clouds; a little to the Northward of *Roden Holme*, lieth the *Pagoda* Bay; with the Bay of *St. John Phipps*, and a little farther to the Northward lies *Schutyns* Bay, which makes bare and barren, when you are abreast of it, the Headland is indifferent high and steep, but the Land in the Country is much higher; between this and the Cape you will find several white Sands.

Cape *Avarillo* lies in the Latitude of 13 degrees North; and is to be known by a Hill, on whose Top stands a high Rock, which may be seen a great Distance off, coming from the Northward or Southward. About thirty-four or thirty-six Miles to the Northward of Cape *Avarillo*,

Between the Hoof *Van Hollands* and *Abers Lotes* Shoal.

Between *Abers Lotes* and *Steen Clippen* Island, From *Steen Clippen* Island to *Pulo Cecier de Terra*, *Padaran* Bay.

Cemerin Bay.

Western Bay.

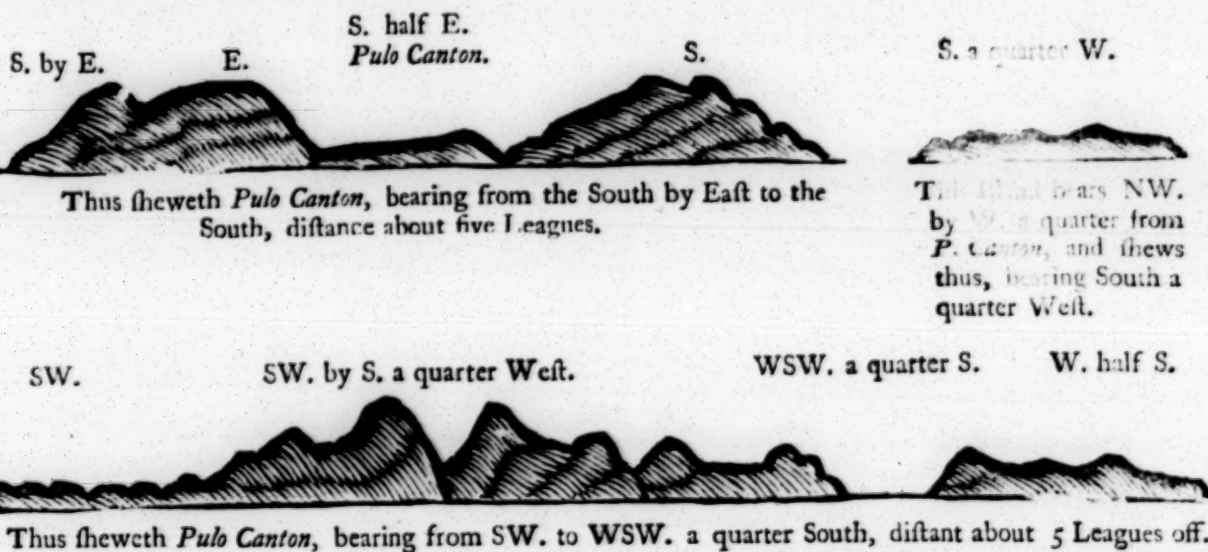
rillo, and about four or five from the Main, lies *Pulo Camber de Terra*, which on the Sea-side, makes with several Spots; and a little to the Southward of it lies a Rock with four Stones standing right up; you may Anchor between this Island and the Main in twelve Fathom sandy Ground, where you may get fresh Water. Near this Island upon the Main is a great River; the Land hereabouts stretches away half a Point more Westerly than to the Southward of the Cape; likewise coming from the Northward you will see, when you come near this Island, a Hill resembling Cape *Avarillo*, but it lies more Northerly; and when you have the Cape South West by West half West of you, there appears a little to the Northward, a little round Hommock, like a Haycock.

Bay *Chinchen*, whose North Point lies in the Latitude of 13 degrees 50 minutes North, is a great Bay, and may be known by a great Rock above Water, like a

Coney-Steeple, as also by some Hommocks that lie something more Northerly, which make like Islands, but coming nearer the Bay, that the opening bears West of you nine or ten Miles, you will see, in the Mouth of the Bay, two Rocks, the Southermost makes in three parts, by which it may also be known.

Buckborns, that lies in the Latitude of 14 degrees 25 minutes makes like little Sand Downs, and you may see them when you are near the Bay.

Pulo Cantin lies in the Latitude of 15 degrees 40 minutes North, and nine or ten Miles from the Coast of *Quinam*, and when it bears North North West thirty or thirty-two Miles Distance, it makes low, resembling a Chest, or Coffin; but North West twenty-two or twenty-four Miles, it makes like two Hills, with a great Saddle, as if it were two Islands.



You may sail between the Coast of *Quinam*, or Cape *Bethang* and *Pulo Canton*. To the Southward of the Cape lies several Rocks, some above and some under Water, but keep in thirty, thirty-four, and thirty-one Fathom, and you have clear Ground; upon *Pulo Canton* is good fresh Water, but come not too near the Islands, because there is foul Ground; right against this Island on the Main of *Quinam*, lies a great River, whose going in is wide, and within five or six Fathom Water, and upon the Point of this River lies *Salenbuigh*, which coming from the Southward, may be seen forty Miles off; the Country hereabouts, by the Sea-side, is much inhabited.

About six Miles North North West from *Pulo Canton*, is a small flat Island, under whose Shore is foul Ground, between which and the Main is good sailing.

Pulo Camponella lies in the Latitude of 16 degrees 20 minutes North, eight or nine Miles distant from *Quinam*, and lies from *Pulo Canton* North North West fifty-eight or sixty Miles. It hath several Hills, and two that are extraordinary high, whereof the Eastermost is the highest; but to the Sea-side the Land is low, with good sandy Strand. On the W. side is good fresh Water, under which, if occasion should present, you may find several good Roads; about the North West Point lie three small Islands, whereof one is very high, and on the South East Point is another



Thus sheweth *Pulo Camponella*, bearing West distant about six or seven Leagues.

Small Island, but less, about South East by East from the afore-mentioned South East Point, eight or nine Miles distant, lies another great Island, called *Componello Falso*, from which there stretches a Reef South East.

The Island of *Aynam*, which, in sailing from the Coast of *Quinam*, you will get sight of in eighty or ninety Fathom in 18 degrees North; and it is found by the experienced Pilots, to lie with its Eastermost Point forty Miles more Northerly than the best Plats make mention of;

and sailing from the Southward, along the Coast of *Aynam*, you will find no remarkable Land but the Island *Tinbosa*, which is the greatest upon this Coast, upon whose West-end is a Bay, and remarkable Hill, very steep on the West-side, but on the East-side is sloping down, and lies in the Latitude of 18 degrees 45 minutes, when *Tinbosa* bears North West half North twenty-two Miles distant from you, and six Fathom, you will see on the Coast of *Aynam* three extraordinary high Hills, whose Westermost hath on the Top two Hommocks, and the Eastermost two; about North East by North twenty-four Miles distance from *Tinbosa* lies an Island, which is indifferent large, called *Tinbosa Falso*, under the Coast of *Aynam*, whose North Point lies sloping down; and between these two Islands are several other Islands, which are nothing near so high or great, also the Land here is extraordinary high up in the Country, and when the East Point of *Aynam* bears North North West, or North West twenty-two or twenty-four Miles distant from it, it makes like broken Land whose SE. side is high, steep, mountainous and craggy, amongst which there is one Hill that surmounts all the rest, with a Gap on the Top of it, which seems like an Island, but the North Point of the Island is not so high; there lies from *Tinbosa Falso*, towards the East Point of *Aynam*, several small Islands along the Shore, as there doth also between the two *Tinbosas* along the South East-side of *Aynam*, and about twenty Miles off, you have fifty and sixty Fathom, and thirty or thirty-two Miles off, you have seventy or eighty Fathom oazy Ground.

Pulo Taylas are barren but not high Islands, and are nine or ten in Number, besides several Rocks, the North-ermost lies in 19 degrees 30 minutes North Latitude, and thirty-two Miles East from the North East Point of *Aynam*, are but twenty-four Miles more Northerly than is usually laid in the Drafts. From *P. Tayas* to *St. John*, the Course North West about forty-five Leagues.

Upon the Island of *St. John's*, whose South-side lies in the Latitude of 21 degrees 15 minutes North, you will see a round and remarkable Hommock, surmounting all the rest, which may be seen from the other high Land coming from the Southward forty or forty-four Miles off; North, or North by West from you, in forty or forty-two Fathom you will find sandy Ground, but coming nearer to it, till the West Point bears North West twenty-two or twenty-four Miles off, you will find twenty-five

Fath. 600 Ground, and so you may sail without Danger.
Directly NNW. 12 Miles from *Pedro Blanco*, on the Coast
of *Canton*, lies a Point of Land to the Offing, to the W. ward

that lies to the Offing; you must keep a good Distance
from the East Point, because of a Reef that lies from it.

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About

PART OF

THE

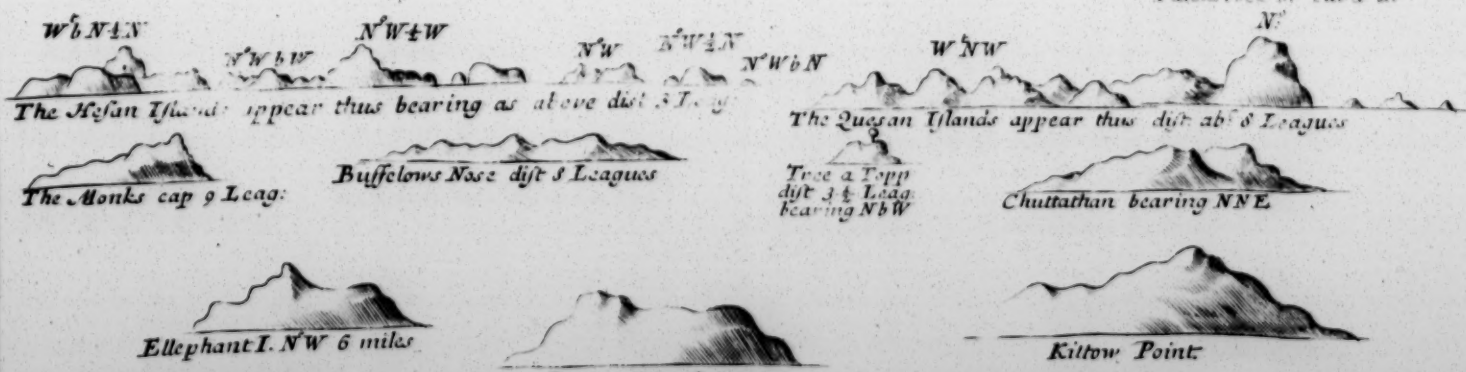
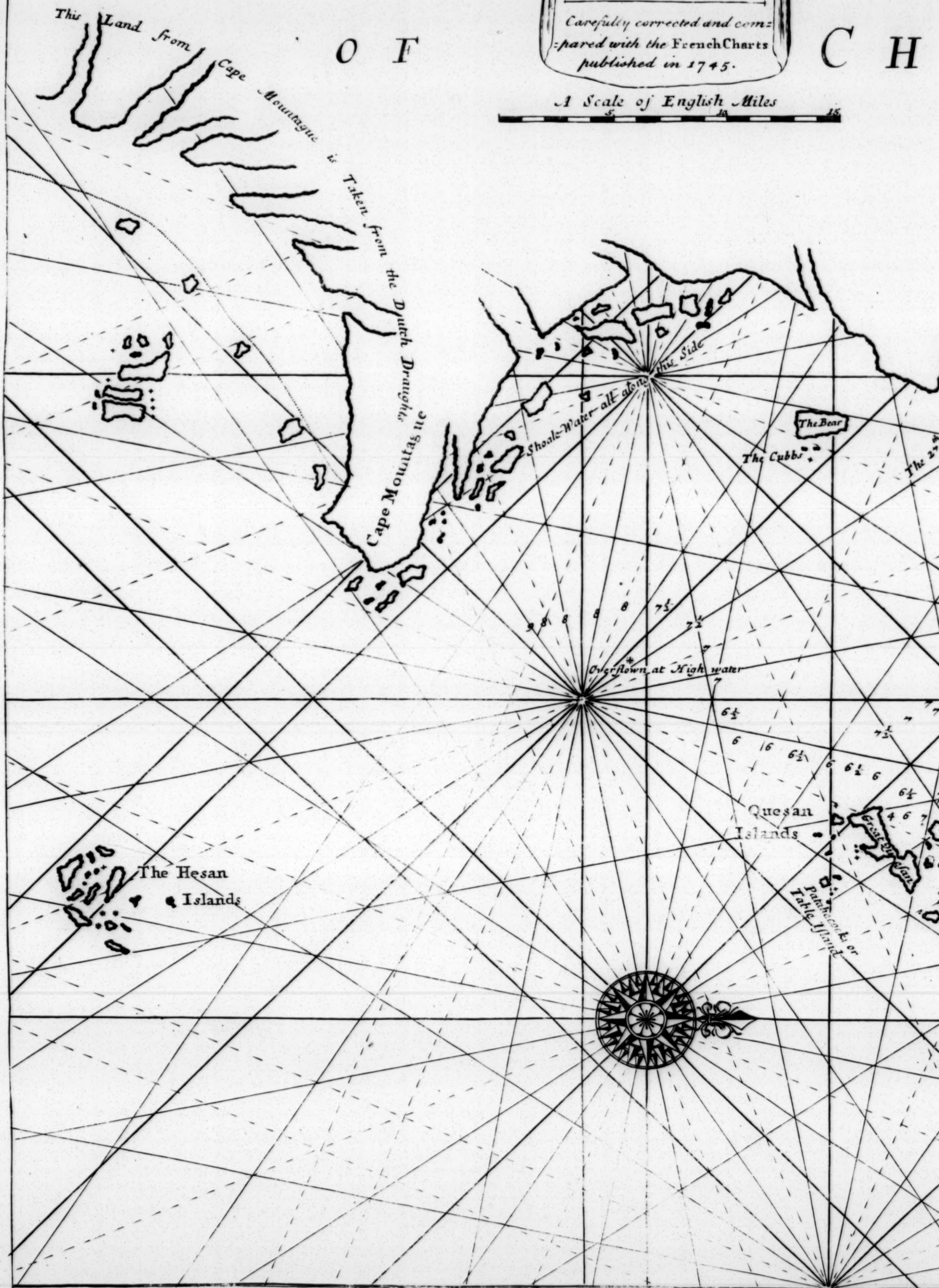
OF

CH

A Large Draught of the
North Part of CHINA.
Shewing all the Passages
and Chanells into the
Harbour of CHUSAN

Carefully corrected and com-
pared with the French Charts
published in 1745.

A Scale of English Miles



E C O A S T

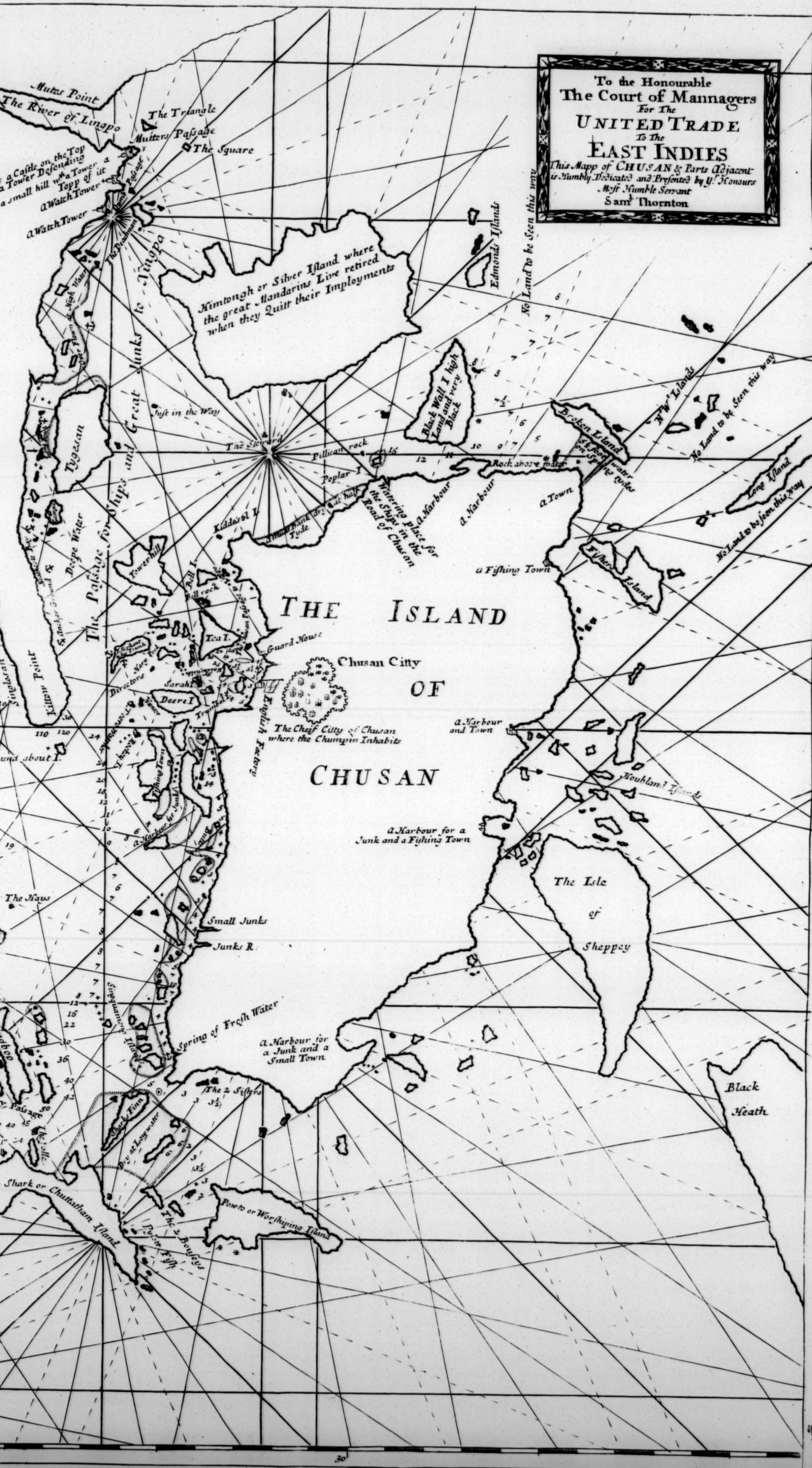
H I N A



IN A



*This Map of CHUSAN & Parts Adjacent
is Humbly Dedicated and Presented by Y^r Honours
Most Humble Servant
Sam^l Thornton*



more Northerly than the best Plats make mention of; nearer to it, till the West Point bears North West twenty-
two or twenty-four Miles off, you will find twenty-five
or

or twenty-six Fathom sandy Ground, sometimes mixt with Shells, it from thence you steer East North East for the *Macco* Islands, you will find the Soundings as followeth, viz. First, It will deepen to thirty-two and thirty-four Fathom sandy oazy, which Depth you must continue till you get sight of the *Isles de Viadosces*, or *Dear Island*, which is an indifferent high large Island, and when you have

it North West you have the best Channel open, and may steer in North North West until you get sight of the *Mountain Island*, leaving *Dear Island* on the Starboard-side, and you will have Soundings along from the aforeaid depth to twenty-nine, twenty-five, twenty, fifteen and twelve Fathom oazy Ground.

Island *Ladarones*.
W. by N. half N.

W.N.W.

Isle de *Lema* NW. a quarter W.



N.N.W. a quarter W.



The two Letters AA are to be joined together.

N.W. half W.

Island *Lantoun*.

N.N.W.

N. by W. half W.



You may anchor between the *Ladarone* Islands, and a small Island which lieth along the great Island *Lantoun*, in thirteen Fathom Water, where you will have these Bearings; the high Peak of *Lantoun* North, three quarters East; *Isle de Lema* East by South half South, and the double peaked Hill, called *Ilba de Ladarones* South East half South; this Island lies from the great Island *Ladarone* East South East and West North West about seven Leagues, here the Flood sets North East by East, and the Ebb South East by East very strong: West by South, about four Miles from the *Isle Ladarones*, is good anchoring in ten Fathom and a half Water; from hence weigh with a reasonable Tide of Flood, and steer North West by West, and North West as the Wind will give leave, till you come into nine Fathom oazy Ground, where if the Tide be spent, come to an Anchor, the highest Point of *Ilba de Lema* bearing E. by S. southerly about ten Leagues off, and the highest part of the Eastermost Island de *Ladarones*, South East by East about eight Leagues, the Castle of *Macco* North West half West distant about four and a half, or five Leagues off, and the Island called *Jaggera*, North North West half West, about four Miles; and here you will be about four Miles from the nearest part of the Islands de *Ladarones*, which are eight or ten in Number, and sometimes make all in one, and sometimes in two, three, four or more, according as your bearing is; when you weigh from hence you ply to windward, observing the Flood which sets here WNW. keeping in six and seven Fath. and if Night come on, anchor in that Depth. (Note, In turning between the *Ladarones* and *Ilba de Jaggera* is fair and clear Ground, as is also between *Jaggera* and the Land to the S.ward of *Macco*.)

From hence weigh with the Flood and ply to windward for the Mouth or Entrance of the Bay of *Macco*, in the Mouth of which you may Anchor in four Fathom and a half good Ground: Bearings as follows, the high Peak of *Lantoun* (which makes in two little Peaks) bearing East by North about seven Leagues, the highest Land of the *Ladarones* South South East half East, and the middle of the Town of *Macco* West North West a quarter West, distant three or four Miles off; here it hath been usual to lie till you have leave of the *Mandarin*, or Governor of the City of *Macco* to enter farther in; for should you do it without his Leave, he will exact a Sum of Money from you, and the sooner you get in the better, for it is very bad riding here.

But if you intend for the North, keep on your Course, and it will continue the same Depth of thirty-four Fathom, as far as *Pedro Blanco*, which lies in the Latitude of 22 degrees 5 minutes North, and is without the Coast of *Canton*; it is a small Island or white Rock clear all round about, so that you may pass within or without it either by Night or Day by the Lead: if you go without it keep in twenty-six Fathom, and if within 13 or 14 Fath. oazy Ground, and so you may sail without Danger.

Directly NNW. 12 Miles from *Pedro Blanco*, on the Coast of *Canton*, lies a Point of Land to the Offing, to the W.ward

of which lies *Harling's Bay*, where you may run in and find a good Road, provided you run without the Island that lies close on board the Shore; likewise there are two Rocks, which you will meet withal in sailing in, which you may leave on either side you please, and anchor in ten, nine, eight, six, or four Fathom good Ground, being in, or before the Bay, you will see in the West by South of you, eight Miles distance, several Islands under the Shore; but they being not well discovered, I can give no Description of them; likewise you will see in the Eastern Shore a Gap, where there is a fine large Inlet, where the *Chinese* sail up with their Junks; it stretches up North.

Bear or *Beias* Bay, lies North North West about ten Miles from *Pedro Blanco*: *eias* is called by the *Chinese* the *Tielzo*, there is also thereabouts several Islands and Rocks, but there is no good Riding for Ships, except under the West Point of the Island, and there you are free from South West Winds.

About East North East from *Beias* Bay, is *Brandon's* Bay, in which you will find from four to seven Fathom good Ground, but coming from the South South East, or East, and intending to run in by the East Point of this Bay, where you may find fresh Water, you must steer in North, upon which Course you will find from ten to six Fathom good Ground and soft Oaze, likewise four Fathoms, leaving the two Islands that lie West by South, and East by North from you; from the aforementioned Point or Port, that is to the Offing, and other small Islands that lies under the Shore within you, do not run between the two first, for here is foul Ground, but you may run to by the North-side of the Bay, that you may be safe from all Winds.

To the Eastward of the East Point of *Brandon's* Bay, lies *Cranmeis* Bay, in which is good Roads for Northerly Winds, in eight or ten Fathom, and to the Eastward of *Cranmeis* Bay, lies *Pisoan de Sibure*, or the great Bay, whose coming in seems to be narrow, but it is wide enough to sail between, and being in, you are free from Southerly Winds, in six or seven Fathom good Ground you may sail from *Cranmeis* Bay to the great Bay, between the Islands that are before the Bay, that is, you must leave two Islands on the Starboard-side, and another greater on the Larboard-side; likewise you may run without any Danger between the two small Islands, and the Point of *Cranmeis* Bay; and from this Point, if you intend to sail without the Island that lies in the Channel, between this Point and *Pisoan* you must steer East and by North, and East four Miles, and then North till you are before *Pisoan*, which Distance is also four Miles; but he that sails between the Island, must be mindful of the Rocks that lie close on board the Shore. About six Miles from the great Bay, or *Pisoan*, lies *Groaning* Bay, in which is a Road for the Northerly Montoons, provided that you are past the Island that lies to the Offing; you must keep a good Distance from the East Point, because of a Reef that lies from it.

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About fourteen Miles East North East from *Groanings Bay*, lies *Reyarson's Bay*, in which is a good Road for Northerly Winds in eight, nine, seven, six, or five Fathom, good Anchor Ground: In running in keep close on board the Island that lies on the East Point of this Bay; and be sure to mind your Lead, because this Island hath foul Ground about it.

Between *Groaning Bay* and *Reyarson's Bay*, lies several Islands, between which you may sail without Danger, in ten, eight, six, or four Fathom good Ground.

The Course from *Reyarson's Bay* to the Point of Land, upon which lie many remarkable Sand-hills, is East North East thirty-six Miles, and depth between them is eight, ten, twelve, fourteen, nine, and eight Fathom good Ground. South West from this point lies a Rock above Water, and about a Cannon-shot from it, there are others under Water, but more Westerly, and are seen at half Ebb above Water. Between *Reyarson's Bay* and the Sand-hills, lies *Nasswire*, as also a small Hill that is called *Black Hill*. From the Sand-hills to the Southermost Point of *Wiringer Bay* is North East twelve Miles, between these two Points is good Roads for northerly Winds, in a sandy Bay, in ten or twelve Fathom good Anchor Ground; you may likewise make a Road for a South South-West Wind, behind the Island which there lieth, about which is foul Ground, therefore come no nearer the Shore than nine Fathom: not far to the Northward of this Bay lies *Tefic*, or *Dry Bay*, where is a good Road under the North East Point.

From *Wiringer Bay* to the Cape of *Good Hope*, or *Pit-to*, is North East or North East by North, about eighteen or twenty Miles, in ten or nine Fathom good Ground; the Cape is high and surrounded with low Ground; and on the West side is a great Bay called *Orensis Bay*, where there is a Road for Northerly Winds in six or seven Fathom, as also to the northward of the Cape; for southerly there is a good Road in five or six Fathom, between two Islands that lie two Miles asunder, but the Islands are set round with Rocks and Shelves; between *Wiringer Bay* and *Amoye*, the Coast lieth along North East by North about forty Leagues.

General Directions for Amoye.

The Passage into *Amoye* is known by a small high Island, called, *The Hole in the Wall*, (because East North East and West South West it is to be seen through) lying in the Latitude of about twenty-four degrees North, and about three Leagues from the Shore, and a high round Hill, with a Watch-house upon it; steering in for the Island, keep the Hill open under your Larboard-Bow, and that will carry you in sight of the half Tide Rock, which you may leave on either side: From thence you will see the Harbour, thro' the same Passage you go in, keep nearest the Westmost and biggest Island, because there is foul Ground off the other, then steer directly for *Amoye*; you may anchor one or two Miles without the Harbour's Mouth, the nearer *Amoye* the better.

Particular Directions for sailing into Amoye.

When you get sight of the *Chappel Island*, or the Island with the Hole in it, which is most commonly known by the Name of the *Hole in the Wall*, which Island lies in the Latitude of 23 degrees 55 minutes North; your Course in, for *Amoye* is North North West, and when the Island

of the *Hole in the Wall* bears North and by West half West, about four Leagues off, then will a remarkable round Hill on the Main bear North West and by North half North, and then are you in twenty-five Fathom, from whence steer with the Island within two Miles of it on the North side, and you will find seventeen, sixteen, and fifteen Fathom.

Note, That when the Island *Hole in the Wall* bears West and by North half North, you will have the Hole open, and when West and by North shut in; the Course for the Harbour of *Amoye* from this Island is North North West as before; and when the Island with the Hole in it bears South West and by South, you will thicken your Water gradually from sixteen to eleven Fathom Water; but if less, you must haul more northerly; but ten, eleven, or twelve Fathom are very good Depths; when you are Mid-way between the Island with the Hole in it, and a long Island, which you will see that makes with two rocky Hills, one at each end, and a sandy Bay in the middle; (which Island you must leave to the southward, or Larboard-side) you will have ten or eleven Fathom, and when this Island bears North West and by West two Miles off, you will have deepened your Water to sixteen Fathom; but from the North East End of this Island lies a Rock pretty high above Water, called *The half Tide Rock*, which Rock you may leave on either side; but most safe on the Larboard-side, sailing within a quarter of a Mile of it, there being sixteen Fathom a-breast of it. Your Course from hence is North West, passing between five Islands on your Starboard-side, and two on the Larboard, you must keep Mid-Channel as near as you can, and you will find fifteen, sixteen, seventeen, and eighteen Fathom.

Note, The nearest Island on the North-side, and the nearest on the South side, lies about one Mile and a half asunder, but when past through between these Islands, steering North West and by North, you will have between eighteen and ten Fath. keeping very near *Amoye* side, going within less than half a Mile of the Shore, farther or nearer, as you find Depth, steering then for the Harbour, where you will plainly see the Junks at an Anchor.

It floweth twenty-three Feet in *Amoye* Harbour on Spring-Tides, and a South Moon maketh full Sea.

Of the Rocks called the Praters.

In the Latitude of 21 degrees 11 minutes North, and Longitude from *Batavia* 9 degrees 30 minutes, lies very dangerous Rocks, called the *Praters*; they lie under Water, but may be known by the Sea breaking on them, and abundance of Spots as smooth as Glafs, inclosed by the said Breakers: This is a terrible place to behold, and requires your Care to avoid them; for in most Draughts they are laid down too much southerly, the southermost part being laid in about 20 deg. 30 min. which, by very good Observation, should lie in 21 degrees 11 minutes as is above said.

There hath been found Masts and Anchors, and it is supposed many Ships have been lost here.

In the Latitude of 15 degrees 32 minutes North, Meridian distance from *Amoye* 3 degrees 14 minutes West, lieth a Bank of Sand, which hath been lately discovered by the *Macclesfield* Galley, on which was found nine Fathom and a half the least Soundings, which, tho' there be no Danger, it may not be amiss to insert it for the better judging of your Meridian Distance.

Instructions from Amoye to Chufan, on the Coast of China, between the Islands, in small Vessels.

YOU may turn out between the Island *Lison* and *Quemoy*, till the *Hole in the Wall*, or *Chapel Island*, bear South West by West, Distance about four Leagues; if it should blow hard, you may tack in and stand for the Shore, but have a care of the westmost point of *Quemoy*, and come not too near it, for there stretches a Ledge of Rocks from it South West, also there is a Sand a pretty way from the Shore, in fashion of a half Moon,

and you will find the Soundings very uncertain; as ten, eight, six, and four Fathom, but you may turn up between it and the Main, a brave sandy Bay, the Land low, and come to an Anchor under Point *Lilo*, or *Daudo*, in three Fathom, there several Ships may ride upon occasion, if the Wind be between East North East and North West, but you must take care not to come too near the Point; for there is a Ledge of Rocks stretching a pretty way to

Sea-

Seawards, to the South East of the Point lies a round Island with a great many Rocks about it, called *Tantee*.

From hence you stand away North East, for *White Point*. Between the Island *Quemoy* and *White Point*, there is a great opening goes in, but there is all foul Ground, right in upon the Main; there are two high peaked Hills, by which you may know it; the Distance between the Eastmost Point of *Quemoy* and *White Point*, is about ten Miles. This Point is easily to be known, for upon it there is a great Heap of white Stones, and a round Castle, with a Flag-staff upon it, off the Point lies a Rock above water called *Tawme Town*, it is low Land all along: About the middle of *White* runs a Ledge of Rocks, at the North East Point, called *Chimbo* or *Chinbo* Point lies four Islands, or Rocks, there is foul Ground a good way off the Point, therefore come not too near. Your Course from the aforesaid Point to *Engling Bay*, is North East distance about fourteen Miles; you may anchor in the aforesaid Bay by the Watch house in ten Fathom, but come no further in; this Bay is to be known by a high Tower upon a Hill, with Stones all round about it, here is good fresh Water running out of a Rock, by the Watch-house; about seven or eight Miles from *Engling Bay*, lie several Islands, one of which is pretty large, and is called *Skate* or *Sbatre*, it hath a great many Rocks about it, upon occasion you may anchor under the North West-side in seven or eight Fathom Water sandy Ground; the next point to the Northward is called *Tatatafshambow* or *Tantuta*; the Course from *Skate* to this Point, is North East about six Miles, it is a high and bluff Point, and upon it there stands an old Castle, by which it may be known. North East by North from *Tatatafshambow*, about five Miles distant lies the next Cape, called *Congbove*, you turn it up from *Tatatafshambow* to *Congbove*, in a sandy Bay, it is a low Land all the way, till you come to the Point *Congbove*, which is high and bluff, with a Ledge of Rocks running off a long way. You may anchor close to *Congbove Town*; a little to the Northward of Point *Congbove* lies Point *Twaja*, it is a pretty high round Point; the next Point to the Northward is called *Shorfo*, it is a high scragged Point with a round Hill upon it, it lies entering into the Bay of *Blw*, which Bay is all full of Rocks, Islands, and foul Ground, with Over-falls, not fit for any but very small Vessels. The next Point is called *Pinghigh*, which is distant from *Congbove*, afore treated of, about seven Miles; off of *Pinghigh*, lieth a Rock very high, and East South East from *Pinghigh* about fourteen Miles, lies the Island of *Geebo*, which appears in two little Hummocks; and East by North, about twenty Miles from *Pinghigh*, lies the Islands of Great and Little *Lamjet*, the biggest is high in the middle, lying along North and South; on the South-side you may anchor in thirteen, twelve, and ten Fathom water, sandy Ground, and ride very secure. Between the Islands *Lamjet* and the Main is another Island called *Masbekaw*, or *Mutebcow*, upon which is a round high Hill with a black Peak at the top: Between this Island and the Main, are a great many Shoals, the Passage being fit only for very small Vessels, and close in to the Main is another, but very large Island, called *China Wlyconkbow*; having past this Island, you come to a point called *Manasan*, from whence, East by South, about 8 Miles, lies the Islands of *Manassaw*, which are very rocky Islands. Your Course from *Manassaw* Point is a long shore between *Hightan Island*, and the Main; *Hightan* is very high Land; the Main, within, is called *Manand Saw*; the next place you meet with is called the River of *Tintangbockshew*, which is about seven Miles to the Northward of *Hightan*; a little to the Northward of *Tintangbockshew*, lies the Point called *Gowfo Cook*, from whence you will see the Island of *Tookfo*, or *Gonkfo*, under which, upon occasion, you may anchor; North North East, about five Miles from *Tookfo*, lies the Island of *Chewbo*; the Main is high and black, shewing in Hummocks, from whence you ply it up along shore, and the next place you come to is called Point *Peeken*, or *Potken*, it is low Land, all along to this Point, and a little to the Southward of the Point, lies a small Island, and a Ledge of Rocks, and East about twelve Miles from Point *Peeken*, lies the Island of *Peeken*; this Island is long, and high at the South-end, and in the middle, with a great many small Islands about it, and some Ledges of Rocks; on occasion you may anchor under Point *Peeken*. From hence you may turn up West North West into the Bay of *Hockshew*, when you are to the Northward of Point *Peeken* it shows very high, and at the top is five round Hills, a small distance one from the other, called *Twata*, or the *Five Tygers*, by which you may know the

River of *Hockshew*; off the River are several Islands, the biggest is called *Hockshew Island*, and East by North about ten Miles from *Hockshew Island*, lies a great Ledge of Rocks, called *Qyeatong*; to the South Eastward of these Rocks, lies the Island *Abreck*, it is a high scragged Island, with several small ones about it. From *Hockshew Island* you will see the Point *Tinghigh*, which lies a little to the Northward, under which on occasion you may anchor, from hence North East by North, about five Miles lie the Islands called the *Five Tygers*, being five in Number, you pass between them and the Main, which will bring you to a Bay called *Ounko*, in which Bay you may anchor. Your Passage is between *Ounko* and the Main, away to the Eastward, to Point *Pakea*. South from this Point lie several Islands, as *Pawatanta*, *Quanton*, and *Scambo*, these three are the largest, and lie almost together, shewing very scragged, and indifferent high, with a great many Rocks and small Islands about them: From the Point *Pakea* runs in the Bay of *Limm*, which hath very high Hills running down in Ridges; the Bay is full of small Islands and Rocks; a little to the Northward of this Bay, lies the River of *Limm*, which hath a great opening running up between two bluff Headlands very high. North, about ten Miles from hence, lies the River *Lintick*, which is a place where they build Junks, and from thence the Course stretches nearest East; you must keep along Shore, and the next place you come to is called *Crankbo*, which is high Land, and is about six Miles to the Eastward of *Lintick*; upon occasion you may anchor under the high Land of *Crankbo*, or in *Loko Bay*, which is a little to the westward of the Eastermost Point in sight, which is called Point *Chopps*; to the South Eastward of this Point lie several Islands and Rocks, the Southermost is called *Scio*, which is a round high Island, the next to the Northward is called *Keo*, which is a long scragged high Island, and the next to the Northward of that is called *Lejan*, which is a round high Island, and very steep at the North end; and to the Northward of Point *Chopps*, lies a round high Island, called *Dusanay*, you pass between these Islands and the Main, the Land being all the way very high, and North North East from *Dusanay*, about six Miles lies 3 round Islands, called *Lomo*, with a great many Rocks about them, you must pass between these Islands and the Main, which will bring you to a place called *Howbov Sown*, which lies a small matter to the N.ward, which may be known by two high Hills upon the Main, called by the same Name. The next Opening you come to, is called *Hognelewongbon*, or *Hognellshewtan* River, which goeth in with a great Bay, and in the Bay is another River, called *Hognellshewtan*, between *Howbov-sown* and *Hognelewongbon*, is a great many Islands, you turn it up between them and the Main, the Land being all the way very high, and in Ridges, and North East about seven or eight Miles from *Hognellshewtan*, lies *Samsy* alias *Samsway*. Your Course thither is between the several Islands and the Main, and North East about eight or ten Miles from hence, lies Point *Hungwby-moung*, off which Point, between the South and East lieth these Islands, called by the Names following; the Southermost *Ameng*; the next to the Northward, *Yonsway*, and to the North East of that, is the Island of *Sbettse*, they are all pretty high Islands, with a little round Hill at the Top; the Main also here is high; the next Point is called *Shotto*, and South by East, four Leagues from this Point, lieth a great many small Islands close together, with a great many Rocks, and very foul Ground about them, they are called *Tyo*; also here near the Main lieth a round Island called *Pondong*, or *Pendouce*; the next Point is called *Leeto*, or *Leckfo*, the Land is all along high, and sheweth in Hummocks; the next Point to the Northward of *Leeto*, is called Point *Peteo*, or *Helo*, which is the Southermost Entrance of the River *Swadia*, off of which Point lieth three small Islands called *Swadia*, the North Point of the Entrance into the River *Swadia*, is called *Pequam*, which is very high Land, off of which lieth a large high Island, called *Pequam*, and almost close to the Island of *Pequam*, on the West-side, lies two small Islands, the Northermost is called *Tea*, and the Southermost *Seo*: You turn it up in a narrow Passage between these Islands and the Main, the Land being all along scragged and high; the next Point is called *Unsam*, a little to the North of which is the Island of *Lackee*, which is a high Island, upon which is two Hills like Sugar Loaves, the next Point is *Kemyuang*, which is a very high Point, by which Point is a deep Bay, where a Ship may anchor in ten, twelve, or fifteen Fathom Water, clear Ground; your Course from hence is North East about twelve Miles along Shore to Point *Empteana*, a little to the Northward of that,

lies

lies Point Passage, between these two Points goes in the River *Pingyanjean*, all along between these two Points is shoal Water, and off of Point *Bessang* lies two Islands called *Safaw*, from hence, to the North-eastward, lies the Islands *Singlow*; the next Point is called *Sowean*, and off the next Bay lieth the Islands of *Hongbong* to the Eastward, about twelve or fourteen Miles, and to the Eastward of this Island lies the Islands of *Nankee*, and to the northward of *Nankee*, about eight or ten miles, lie the Islands of *Peeckee*, these Islands are all high and lie scattering. You keep between the Islands and the Main on to *Hightow Cang*, upon which Point is two high Hills like Sugar Loaves, by which it may be known. A little to the northward of which lies the Point *Unshew*, which is a very high and bluff Point; between Point *Unshew* and *Hightow Cang*, lies the River of *Hightow Cang*, and in the North Point of the Bay of *Unshew*, lies the River of *Unshew*; close by the River is a great, high, black Mountain, appearing round and sharp at top; a little to the North Eastward of that, is the Island *Lampe* and *Lack*, between them is an Island called *Long Island*, also a round Island, where a Ship may anchor in fifteen, twelve, and ten Fathom good clear Ground, if the Wind blow hard North East, or north-easterly; *Long Island* is a low Island, so that a Ship may anchor on either side as occasion may require; near in with the Shore lies the Island of *Sapan*, which is very high in the middle: You may anchor between *Sapan* and *Long Island*, and your Passage is between them, but the Water is shoal, (on the East side of *Long Island* are three Islands called *Tingfwan*, and on the North of *Sapan* is a great many Islands running home to the Main, as *Shammon*, *Ovenway*, *Whyanfe*, &c.) after you are past between them, you run in for the Main; to the North East, where lies a great many Islands scattering, the biggest of which is called *Pollaca*, which is round and high; the next without that is *Shoppea*, also an Island called *Twapetan*, the Main is here indifferent high; the next Point you come to is called Point *Hillington*, to the Eastward of which lieth the Islands following, *Tuapong*, *Somony*, and three or four peaked Islands without them, called *Samsiwam*. You turn it up from Point *Hillington*, among the Islands, to the Island *Cbecock*, which is a very high round Island, with a Peak on the top, and by it a small Island very remarkable; they are by themselves, you turn it up between them and the Main; here the Main all along appears in round Hills, to the N.E. of the Island *Cbecock*, lieth the Island *Hunghey*, the East end is high and bluff, there also lies a Rock, which appears like a Sail, there is another Island pretty high, and large, and a great many small Islands about them, you pass between them and the Main to the River *Highbow Congbow*; the next Point from thence is called *Swangow*, upon the Point there is 4 little round Hills, by which it may be known, the Land all along, is scragged and high. You may turn it up along Shore, which will bring you to *Tangfieke* and *Goodhomoy*, to the N. ward of which about five Miles, lies *Wittow*; upon this Island, there is a flat Hill like a Table, by which it may be known, and to the Northward of that, is two high peaked Hills, one is black, and the other hath a high white Rock, in the fashion of an Image, which is very remarkable; they may be seen along way off; there is also some high scattering Trees, the two small Islands to the Eastward, called *Cheuse* and *Sowey*, then you will see the going in of *Shipowfow*, which is a Passage amongst the Islands, and shews like a River, but it is shoal Water; by a good Observation *Shipowfow* was found to lie in the Latitude of 28 deg. 59 min. You go through the afore said Passage, which will bring you to a Place where there rides a Mandarin Man of War Junk, and there is a Castle and Watch-house, on Occasion you may ride amongst them very safely; after you part from hence you will come to a narrow Passage, where the Tides run out very strong and round in Eddies; this Place is called *Septowfowmay*, the Head-lands going into this Passage is bluff, and away to the Southward of this opening are three Islands, one big and very high, and going out to seven each side, both to the Southward and N. ward, the Isle is called *Cape Soway*; from hence you may stand to the Northward, which will bring you to *Packbecock*, which is a round high Island, as also *Chewhee* and *Goulo g*, which is pretty high Land; the next Island to the Northward, is *Lambeo*, which is likewise indifferent high, you turn it up between these Islands and the Main, there being all along round Hills; also you turn it up along shore to *Ketow* Point, the Point of *Ketow* runneth out a long way, and off the Point lieth an Island; the North-

side of *Ketow* is a very high, running down in Ridges; away North from *Ketow*, about 6 or 7 Miles, lies the going in of a great Passage to *Chusan*, off which lies two Islands.

Instructions for Sailing into Chusan Harbour, between the Island of Powto, and the East-end of the Island Chusan.

When you weigh from *Powto* Harbour, be sure to edge over to the Westward, towards *Chusan* side, for there you will have the deepest Water, as five, four and a half, four, and three Fathom and a half; and on the East-side is but two, and one and a half, it is best to have the Tide of Flood with you: mind to keep the West-side close to the Point, for in the middle of the narrow lieth a great Rock, which at High-water is overflowen; keep down along the East-side of *Chusan*, and if the Tide be down, or bloweth hard, you may anchor in the Opening, between *Singquamong* and the East Point of *Chusan*, in four Fathom Water oazy Ground; from the said East Point of *Chusan*, you must edge away to the South East, for on the West-side it is very shoal Water; but in keeping to the South East, you will have very good Depths, as five, six, and seven Fathom Water, keep to the Eastward till you open the Passage between the South-end of *Singquamong*, and another large Island that lies to the Southward thereof, about five Miles, steer away West, between these two Islands, leaving the small Island that lies off *Singquamong*, South West (which Island is foul) to the Northward, and you will have twenty Fathom; continue the said West Course till you come to the Opening between *Ketow* and other Islands, which lie to the Northward, the Passage to *Chusan* being between *Ketow* and these Islands; the Point of *Ketow* runneth down in Ridges; from hence your Course is directly North for *Chusan*, but before the Town there is two Islands, which hinders your seeing of it; but so soon as you have past the West-end, you will discover it, and then edge to the Eastward between the Islands and *Chusan*, and you may anchor in seven, six, five or four Fathom, oazy Ground, where you may ride secure from all Winds; at the West-end of the Town there is a small Opening, where small Vessels and Boats go for *Lingpo*.

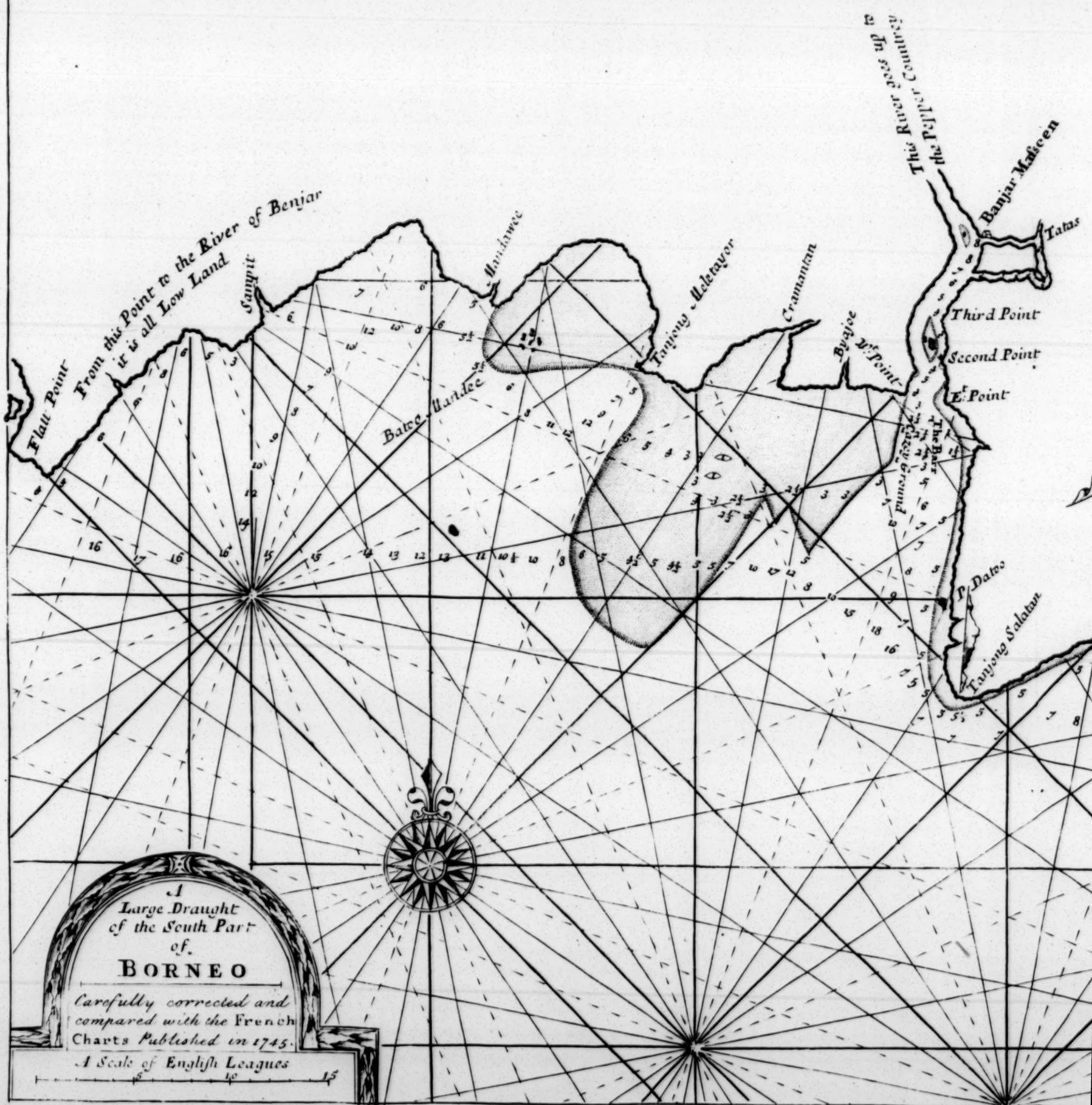
East North East from the North-end of *Powto*, lieth the Island *Packutkow*, distant about four Leagues, it is a high Island, and pretty round, running sloping with a low Point to the Eastward, with a Peak at the top, close to it is 2 small Islands called *Packockcowboy*, which is the Eastermost Island in sight from *Powto*, and North East lies the Islands of *Kemfway*, they lie all along on a Row, being low to the Westward, the biggest of which lies N. E. from *Powto*, to the Westward of *Kemfway*, lieth the Island of *Awo*, which is a large Island, very high in some Places, and runs along to the Northward of *Chusan*; and due West from *Powto*, lieth the East-end of the Island of *Chusan*, the distance between them being about two Miles; the Harbour of *Powto* is on the S. W. side; you may sail in either on the East or West-side.

If you fall in with *Packackno*, which lieth to the North Eastward of *Powto*, and design to go between the East-end of *Chusan* and *Powto*, you must sail away to the Westward; but have a Care you run not into the great Bay, between *Chusan* and *Awo*, for there is very foul Ground, and a great many small Islands, but in steering S. W. by W. you will avoid it, which will bring you near to the Island *Powto*, give the North Point of *Powto* a good Birth, it being foul, and then direct your Course to the Southward, keeping nearest to *Powto* side, and you will have 10, 9, 8 and 7 Fathom Water, till you come to the Anchoring Place, which as before said, is on the South-West side by the Watch-house, the East-most Channel to *Powto* is between the Island *Chutatham* and *Powto*, off of the North Point of the Island *Chutatham* there lieth a small Island like a Rock, it lieth a pretty way from the Shore; to the South Eastward of this Island are Islands more, in sailing in between *Powto* and *Chutatham*, keep mid-Channel, or rather nearer *Powto* side, till you open the Watch-house at the Anchoring-place, then sail for the Shore, where you may Anchor in what Depth you please, all along the South West side, in twenty, eighteen, sixteen, fifteen Fathom.

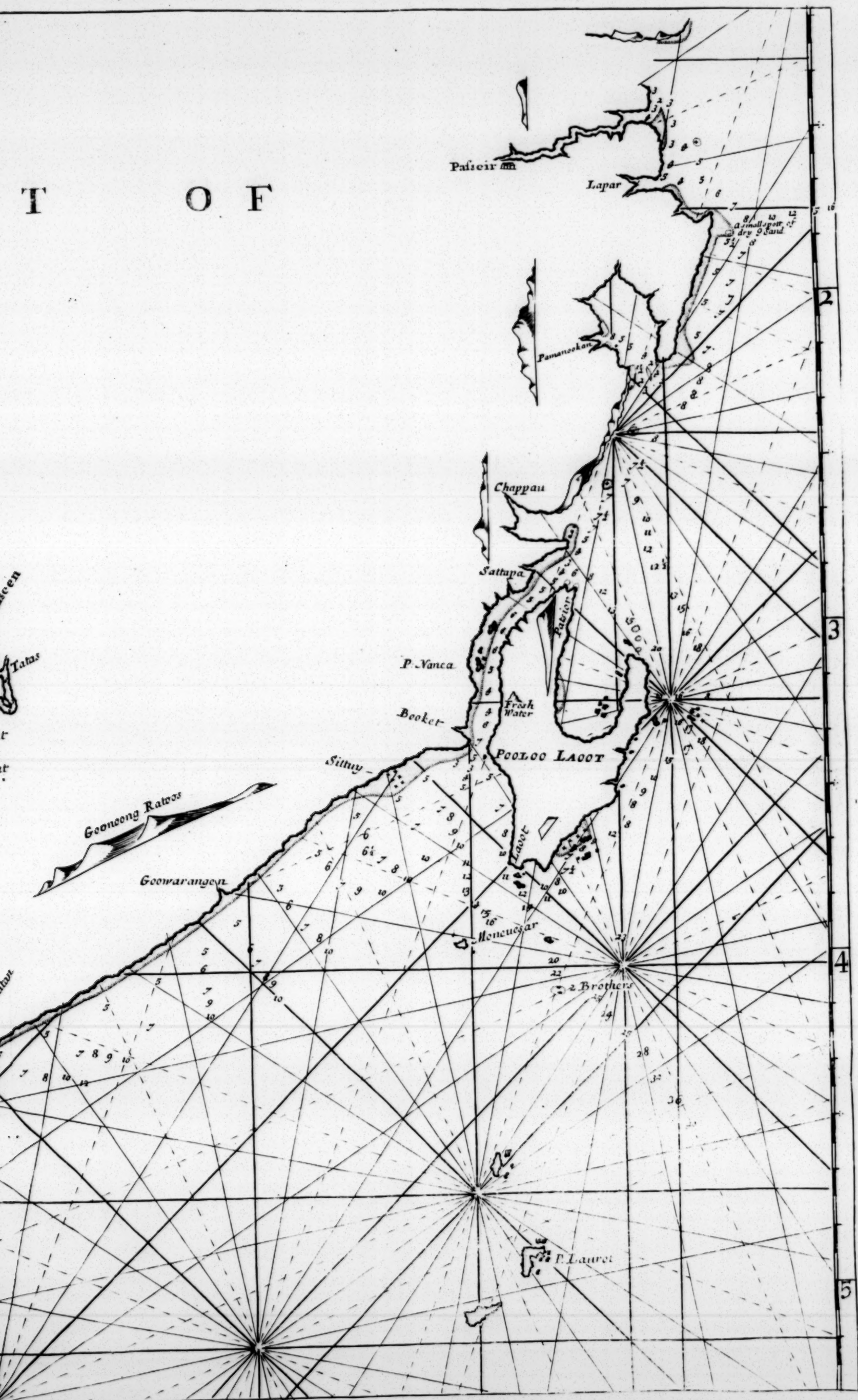
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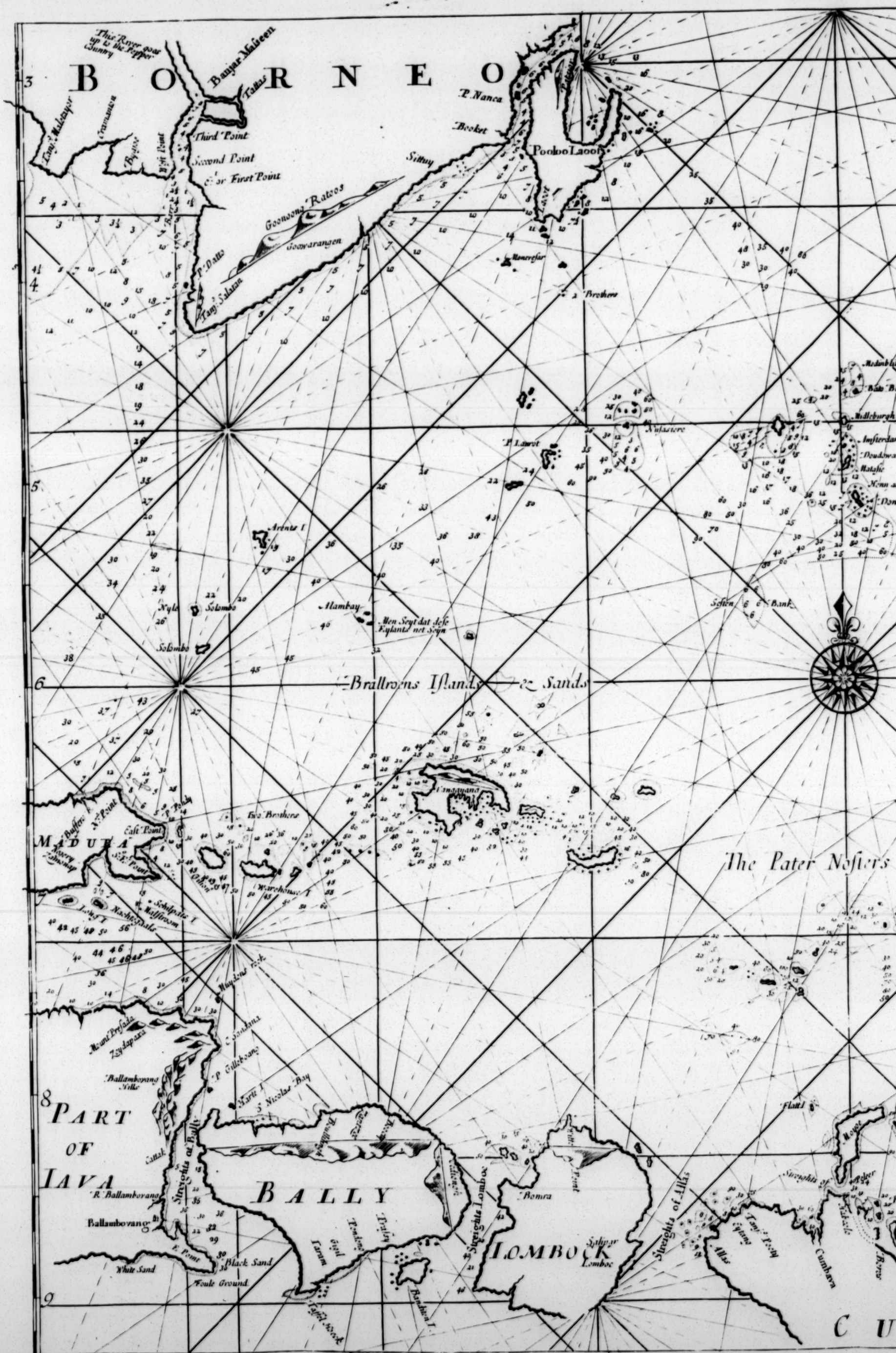
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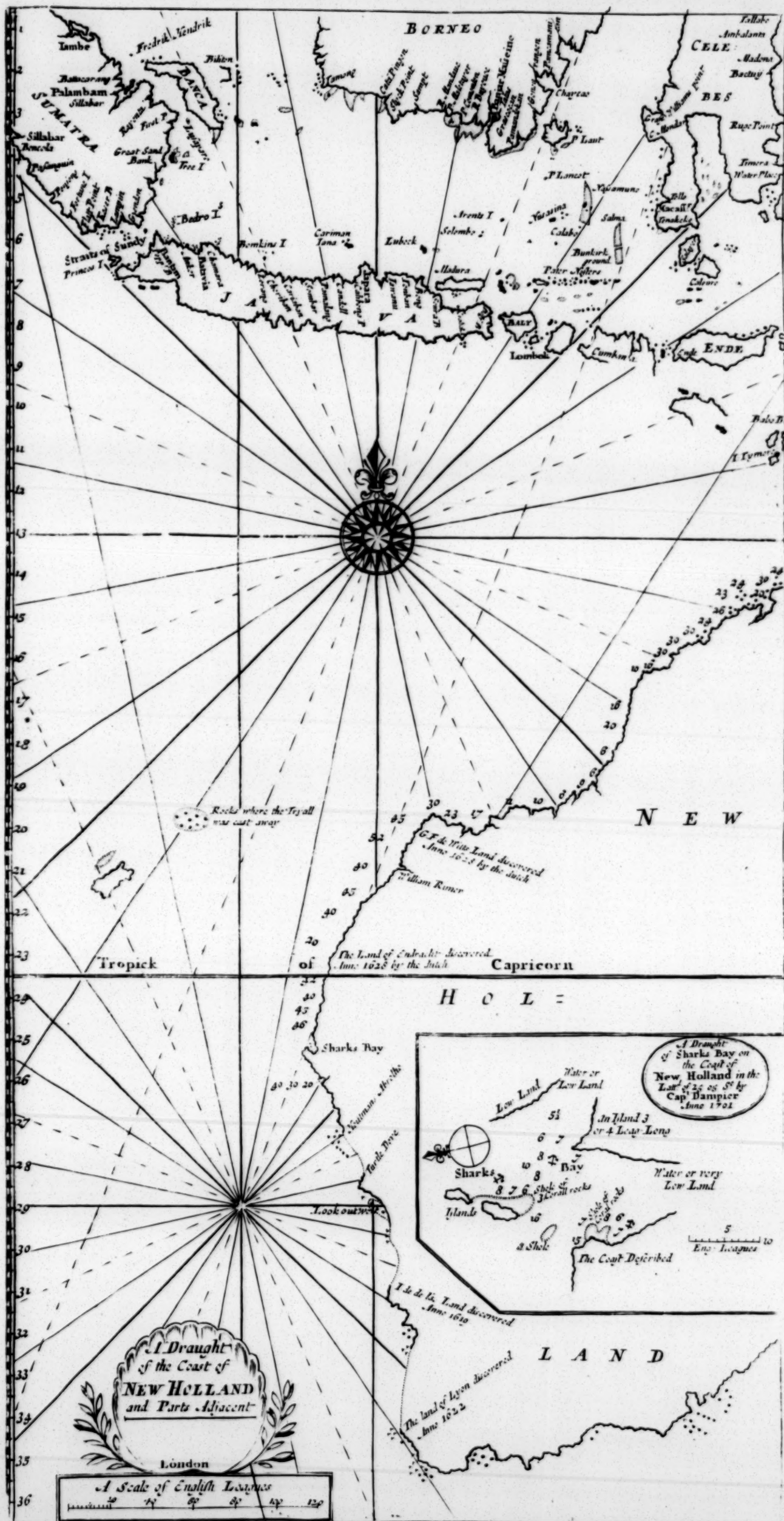


T O F









Directions for coming out to Sea from Chufan, and Sailing without all the Islands to Amoye.

When you have weighed and got about the West End of the Islands that lie before the Town, steer away South by East, and South South East, keeping Mid-Channel as near as you can, for the West side is shoal, and there are Rocks and small Islands all along the Shore; when you get down to the first opening, which is on the West-side, you will see a long Island pretty high and bluff, and upon the bluff Point white Rocks and Stones, and a small Island lying off the Point; on the East-side it is high Land, and at the Top there is a flat like a Table, and without this long Island, there is a high round Island which is all white, and also three or four more small Islands; South by East from hence is the East Point of Ketow Island, which is very high Land; a little to the Eastward of Ketow East Point is a small round Island; you may go on either side this Island, but most commonly on the West-side; from this Island your Course is S E. by South, which will carry you to the opening that goes out to Sea, which is between the Island *Towbyway* and *Lamboo*. *Lamboo* side is all full of Rocks and Islands, and broken Ground; when you have got to this Opening, steer away South East and South East by East, which will carry you through, minding to keep nearest the

North-side, for that is the deepest and bold, and when you are through you will open the Island *Chutatha*, which is very high and black Land, running to the Eastward, with a long Nose, which is called the *Shuffel Nose Shark*, a little to the Eastward of that, is a small Island showing in two round Hommocks; keeping the aforefaid Course you will see the Passage to the Northward that goes in between *Whyfway* and *Chutathan*, which is called *Owfwaymong*; this Channel that is here treated of, is reckoned the best Channel to go either in or out from *Hufan*.

When you are got to Sea, you will see to South South West the Island of *Quefan*, and to the Southward of that *Packebecook*, which is a high round Island, rising up with a Peak on the Top, and by it two other small Islands. *Quefan* is a long Island, stretching away to the Northward, it is not very high; from your coming out to Sea, you steer away South East by South, and South South East, to go to the Eastward of the Island of *Hufan*, and when you are a-breast of it, steer away to the Westward South South West and South West by South, which will carry you without all the Islands to *Sompanna* and *Lamke*, continue the aforefaid South South West Course, and it will carry you without all the Islands to *Sangbells*.



Packebecook, bearing W. about 5 Leagues, appears thus.



Quefan Islands, bearing W by N. about 4 Leag. off, sheweth thus.



Thus sheweth *Hufan Houghbooy*, when it bears West about 4 Leagues from you.



Thus sheweth the Island of *Sampanna*.

The highest of which sheweth like a round peaked Hill, from whence steer South West and it will bring you in sight of *Tyuan Point*, alias *Rawlingtow*, the North Point sheweth high and bluff; from hence steer South

West by West, which will bring you in sight of the high Land of *Pekin*, at which Time you will see the Island *Hightan* bearing South West by South Southerly, Distance about eight Leagues.



I. *Shangbells*, WNW. 6 or 7 Leagues off.



When the Point *Rawlingtow* bears S E by S. distant about 8 or 9 Leagues, it sheweth thus.



I. *Pekin*, NW. 7 Leagues shews thus.



High Land of *Pekin*, W. N. W. 10 or 11 Leag. shews thus.



The high Point of *Cookso*, shews thus, bearing W. Northerly.



Island *Hightan* W by S. Southerly, 9 Leagues off sheweth thus.



When the Island *Hightan* bears NNW. or N. by W. 5 Leagues off, it appeareth thus, with low Islands at each End.

These two Islands lying off of *Hightan* called *Gowfow* and *Sowfow*, sheweth thus, when they bear WSW.

To the Northward of *Hightan*, is a high Peak called *Cookso*, and to the South West of *Hightan*, is a long low Island, and to the Southward of that, is a pretty high round Island, with a Flat at the top, which is called the Island *Lamjett*, and within, near the Land of *Manassow*, there is a very round and steep Island, and to the Southward of *Hightan*, there are two Islands lying off, called *Gowhaland*, from hence you steer South West to

the Island of *Ockow*, which lies East by South from *Biew Bay*; from hence your Course is West South West, which will bring you to *Congbove Point*. The Island of *Ockow* is low, shewing in two Peaks. The Islands of *Biew* is pretty high, all the Land along from *Biew* to *Ingling River* is but low, but on each side of the River it is high.



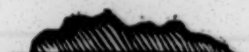
When the Island *Lamjett*, with the high Land within, bears NW. by W. distant six Leagues, it appears thus.



The high Land betwixt *Hightan* and *Lamjett* sheweth thus.

From *Biew Bay* your Course is South West for *Whitto Point*, from whence you may plainly discover

Quemoye, bearing West South West, about fifteen Miles off.



When the Island *Ockow* bears NE. by N. distant 5 or 6 Leagues, it sheweth thus.

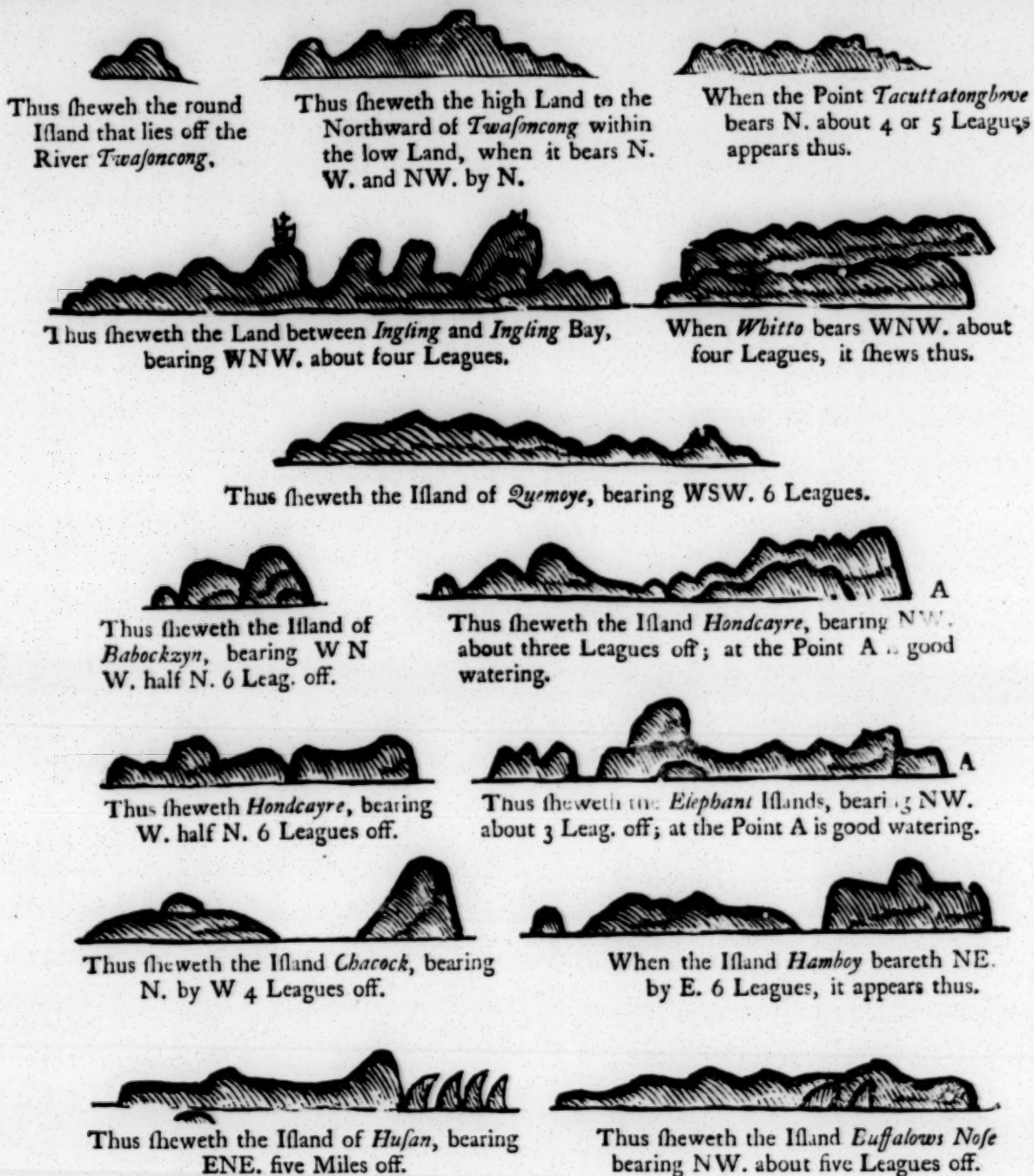


When the high Land of *Biew* bears N. or N. by E. it appears thus.

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Thus



Directions for Sailing on the South Part of Borneo, from Oedjong Salatan Point, into Banjar River, over the Bar, and in the said River as high as Banjar Town.

FROM the Point of *Oedjong Salatan*, which is the Southermost Point of *Borneo*, stand up along Shore, coming not under six Fathom, and when you come within fifteen or sixteen Miles of the River's Mouth, you will raise the East Point of the River, being low Land, and shewing at first like an Island, a small Distance from the other low Land, and making somewhat higher, and will bear North half West, if you are in six Fathom Water on the East Shore; from which Distance and Bearing, steer away somewhat to the westward of the River's Mouth, till you bring the East Point of the River North three quarters East, at which Bearing, and nine Miles Distance, you will come to the Foot of the Bar, which shoals quick from five to three Fathom, being all oazy, and then you will see the Land to the westward of the River's Mouth, being all very low; and in the opening of the River you will see an Island making somewhat higher than the other Land in the River, with Trees on it. From the aforesaid Bearings, to go over the Bar, steer North by West till you bring the Island in the River a large Sail's Breadth open with the third Point, on the East-side of the River, then the Island will bear North a quarter East, and the East Point of the Rivers Mouth North by East northerly; then stand North, and as you run in you will gradually bring the East part of the Island shut on with the third Point on the East-side of the River, and the second Point on the West-side of the River, a small matter shut over the West-side of the Island. When you have the aforesaid Marks, and the East Point of the River's Mouth North North East 4 Miles off, then you are over the Bar, and may steer away with the Island, or a little more westerly, to go near the West Point of the

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River: The East Point being shoal near a quarter of the River over, and when you are shot a little above the West Point of the River's Mouth, then stand away cross the River for the second Point on the East-side (to go clear of the Flat which stretches down from the aforesaid Island directly towards the Rivers Mouth) about one Mile and a half (rounding the said Flat or Sand, which will plainly appear by your Lead) from whence steer for the second Point, as aforesaid, and then keep the East Shore close aboard, the Island being flat, till you come two Miles above the Island, then the River is bold from side to side; about seven Miles above the Island, on the East Shore, is the Mouth of a small River, which goes up to *Tatas* and *Caitongbe*, from the Mouth of which to *Tatas* is twenty Miles, and from *Tatas* to *Caitongbe* is sixty Miles; from the Mouth of the said River, to the Mouth of *Banjar* River is five Miles, keeping the East Shore aboard to avoid the Spit stretching from the Island near opposite to *Banjar* River's Mouth, where anchor with the Town open with the River's Mouth, as near to the Mouth as you please.

In coming on the Bar, at your first Entrance you will have as shallow water as you will meet with in going over, which, at a Spring Tide will be fourteen Feet at high water; which depth, steering by the aforesaid Directions, will continue for five Miles, that is till you bring the East point of the River's Mouth North North East, four Miles distance, then you will begin to deepen the water.

Note. That in coming over the Bar, if you are too far to the Westward, you will have sandy ground and less water; but going over the best of the Bar, and all the way, as before directed, is soft oazy. It

It flows here nine Feet on a Spring Tide; there is but one Flood that runs up in 24 Hours, and that is always the Day-Tide, and runs about 8 Hours indifferent strong, the Night-Flood is no more than a slack Water, and rises very little.

Few Ships go in or out here without Grounding on the Bar, which being very soft pazy Ground, and always smooth Water, no Danger has ensued.

Banjar is the place where European Ships ride; it is inhabited mostly by Fishermen, there being but few Trading People; their Houses are chiefly built on Floats of Trees and Bamboes: those

on the Shore stand on Stilts, or Piles, about four or five Feet from the Ground, being but very mean, and but one Story high.

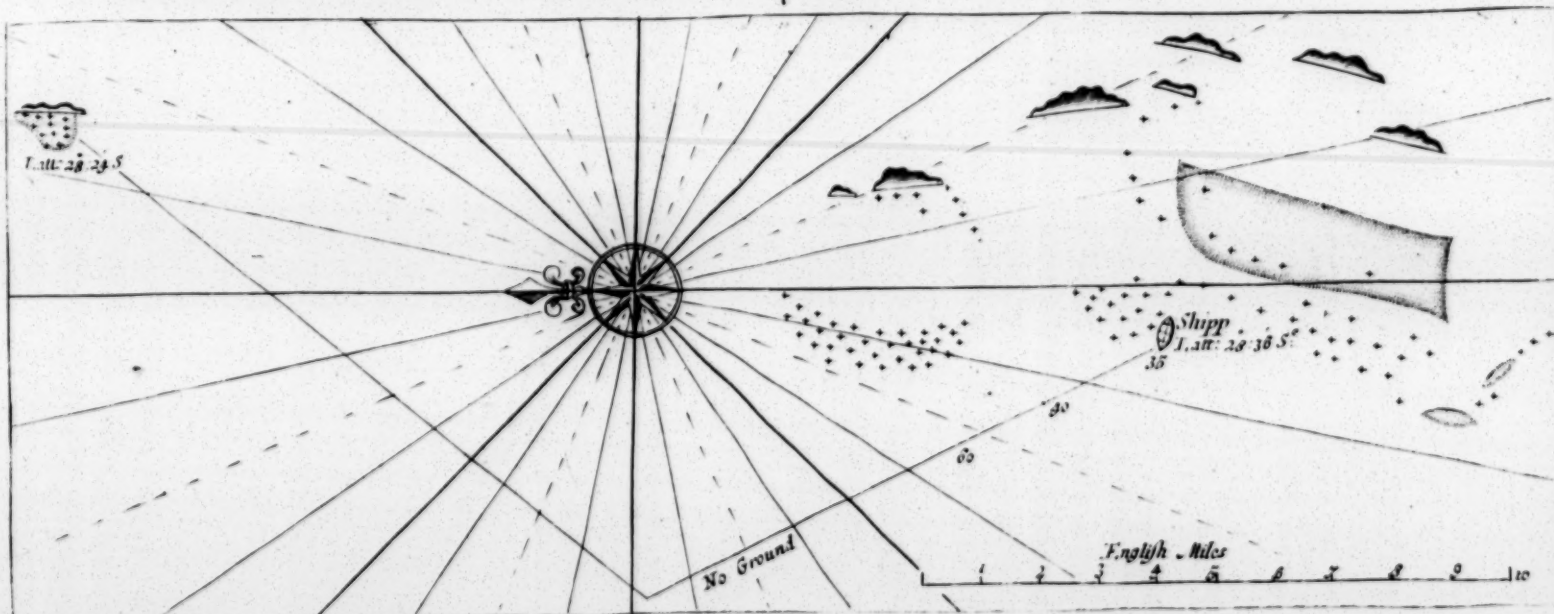
The best way to ride here is to keep the Houses, or Town, open of the River's Mouth, laying your small Bower about half a Cable's length off the Piles, and your Stream Anchor towards the West Shore; and then, if your Westmost Cable should give way, you will receive no Danger from the Eastern Shore; but if your Eastern Cable should give, you may chance to receive Danger on the Flat that stretches from the Island a little to the Northward of the Mouth Banjar River; so that you must be very careful of it.

A Description of dangerous Rocks and Shoals on the Coast of New-Holland, from Cape Falso towards Batavia. Discover'd by Capt. Daniel, Commander of the Ship London, in 1687.

FROM Yesterday Noon to this Day Noon, Course by Compaſs, viz. East North East, which carried us Variation Lee-way allow'd, North East by East 118; the Course, by Estimation, is East 44 North, Distance 138, producing the Difference of Latitude by Account 96 North, and the Meridian Distance 99 East, this 24 Hours the Wind from the W by N. WNW. and W. to the SW. by W. very gully Weather all Night, fearing which, furl'd our Main-Top Sail before Night, and run with both our Courses set, till six this Morning, at which time the Gale moderated, set our Main-Top-sail, steer'd by Compaſs NE. by E. the Wind at SW. by W. till ten o'Clock this Forenoon, at which time the Water was discoloured: A Man at our Fore-Top saw a Breach right a Head of us, we presently put our Helm hard a Starboard, and stood away NW by W. and by the Providence of the Almighty weathered the NW. end of it about half a Mile; the depth of Water at that Distance 35 Fathom, white corally Ground, with some Tide mixt with it, the next Depth (which was about two Hours after we tack'd) was about 40 Fathom, the same Ground as before, and at nine o'Clock at Night, having run off by Log, on a NW. by W. Course about 24 Miles, had no Ground with 65 Fathom. We continued Sounding all the Night; and had never less than 65 Fath. out at a time. And at six this Morning, which was the last time we sound'd, veer'd out 100 Fathom of Line, but had no Ground, at that depth; the Breach we first saw happened to be the northernmost of all (there being several) and, by our Computation, lies near twenty Miles in Length along the Shore, which lies by the Compaſs WNW. and ESE. but the Main Land we could not see, but likewise saw within this Breach (which Distance was forced to borrow so near to) another not far distant from it, which made a Channel, and the Water smooth between them, and likewise within all these were seen several small sandy Islands white, with some shrubbed Bushes on them, they seem'd to be steep too; the Water making no Breach on them, though very low, or near the Water's Edge. The Breach which lies within, hindereth the Sea from breaking on those Islands; the Water being very smooth, provided any Man should be so unfortunate as to fall in with the South end of them, I fear their ever getting off again, without being favoured by the Providence of the Almighty's sending the Winds off Shore, otherwise almost impossible to escape it, having a prodigious swelling Sea upon the Breach, and the Breach lying along the Shore at least twenty Miles visible, besides what other Dangers not seen, that lie to the SW. end of them, trenching off at least four or five Miles to the Southward, which makes me mention the Danger of falling to the South-end of them, from whence God deliver all

Men from such eminent Danger, as in all probability they can expect nothing but being Shipwreck'd and lost; the Variableness of all the Ground we had, running Eastward or Westward is of no Certainty, and accordingly no Dependance to be made on it. I might have enlarg'd my Discourse, but being surpriz'd with the Danger we were in, had not the Opportunity of writing more particularly; therefore our Errors or Neglects are excus'd; and to conclude, instance this, viz. That the Distance between Cape Bona Esperance, and the Land of Endraught, or Hollandia Nova, is a great deal less than is made by the plain Sea Chart, and is possible to find the Distance shorter by the running of the Currents than in reality it is, so that the Land called Endraught, or Hollandia Nova, may be sooner found than expected, and the Shore to the Southward of 27, hath many Dangers, on which great Breaches are visible about 20 Miles in Length along the Shore by Computation; between them and the Main Land are several Islands with shrubbed Bushes on them, where every Man ought to be very careful to avoid them; it is necessary by Night, or cloudy Weather, to use the Lead in time; for about 7, 6, or 5 Leag off from the Land there is found Ground at 100, 80, or 70 Fathom Water (as by the Book India Waggoner) which Relation I find very good, only the Depth, which that speaks of, coming on it, which if so, it must be to the Southward; for before our tacking off to the NW. by W. by Compaſs, and running on that Course about 4 Leagues off, had no Ground in 65 Fathom of Line, yet still in sight of it, which makes me think that the Discovery was made on the South end, which is the most dangerous Point, since we found no Ground at the North end of it; at about 12 Miles of it, to the NW. by W. steer'd by Compaſs, no sooner that we had tack'd, and bent our Cables, and lowered our Anchors below our Channels, fearing some broken Ground, not visible without it (but it pleas'd God there was none) we had a favourable Wind, and, by God's Assistance got clear and out of sight by Morning. I made my Account when I saw it from Cape Falso 71 deg. East, Meridian Distance, and Latitude by Observation, 28, 36 South, by which we found it not so far to the Eastward as is laid down in our plain Draught, by 111 Leagues, or, at least, otherwise may be imputed to our half Minute Glass being too short, or otherwise by Currents, the Breaches bore off us at our tacking as underneath, which computes the Distance of them along the Shore.

Latitude, by Observation, 28 deg. 2 min. South, Meridian Distance West from the Land first seen 1 deg. 16 min. Variation by Evening Amplitude, after sight of the Land, 3 deg. 24 min West, and this Morning by Amplitude 3 degrees 28 minutes West.



Of the Tryal Rocks.

There is some wild Reports going into Batavia, that they have been seen for above twenty Leagues in Length, but by most laborious Inquiry, could never hear of any Person that ever saw

them; it is therefore adjudged false, or that they are farther to the Eastward, than any Ship deligned for the West-end of Java will go, otherwise must have become familiar to the Dutch, who yearly have some one or other of their Ships that sail over it, if their Accounts be good.

A TABLE of the Latitudes and Longitudes of the principal Capes and Headlands between the Land's-End of *England* and Cape *Bona Esperance*, the Longitude reckon'd from the Meridian of the *Lizard*.

Places Names.	Latitude	Longit.	Places Names.	Latitude	Longit.
L izard	49—57	N 00—00 W	Cape de Mount	06—35	N 04—50 W
Ushant	48—30	N 00—00 W	Cape Menferado	06—10	N 04—10 W
Cape Ortegal	44—00	N 01—00 W	Rio Sester	05—30	N 02—30 W
Cape Finistère	43—10	N 05—10 W	Cape de Palmas	04—05	N 00—30 W
Rock of Lisbon	39—00	N 04—20 W			
Cape Vincent	37—06	N 04—00 W			
Western Islands.					
Tercera	38—55	N 21—30 W	Cape Tres Pontas	04—15	N 05—50 E
Gratiosa	39—25	N 22—05 W	Cape Formosa	04—10	N 12—10 E
St. George's	39—02	N 22—20 W	Cape St. Joan	01—18	N 16—30 E
Pico	38—45	N 22—30 W			
Fyal	48—52	N 22—46 W	Upon the Coast of <i>Angola</i> .		
Flores	39—42	N 24—45 W	Cape St. Clare	00—00	S 16—30 E
Corvo	40—00	N 24—50 W	Cape Iopo Gonzalves	01—00	S 17—00 E
St. Michael	37—54	N 18—30 W	Cape de Padion	06—05	S 20—00 E
Formiges	37—25	N 18—05 W	Cape Negro	16—10	S 19—30 E
St. Maria	37—00	N 18—20 W	Ostro de Pedro	22—50	S 22—00 E
			Cape St. Martin	32—30	S 22—00 E
			Cape Bona Esperance	34—25	S 22—30 E
Madeira	32—20	N 10—28 W	Islands lying betwixt the Coast of <i>Brazil</i> and <i>Angola</i> .		
Porto Sancto	32—50	N 10—26 W	Poneto de St. Paulo	01—48	N 18—55 W
Serters	32—10	N 10—30 W	Abrolho	00—00	20—10 W
			St. Matheus	01—38	S 01—00 W
Cape Cantin	32—13	N 03—50 W	I. Ferdnando Poo	02—40	N 16—00 E
Cape de Geer	30—08	N 05—50 W	I. del Principe	01—30	N 15—05 E
Cape de Non	28—35	N 40—44 W	St. Thome	00—00	13—45 E
Cape Bajador	26—12	N 09—00 W	I. Annabon	01—22	S 12—45 E
			I. Ascension	07—55	S 10—10 W
The <i>Canary</i> Islands.			St. Helena	15—54	S 01—00 W
Salvages	29—55	N 11—28 W	I. Fernan de Noronho	03—50	S 28—00 W
Alegreanca	28—50	N 07—30 W	I. de Trinidad and } Martinvaiz }	20—20	S 25—05 W
Lancerotta	28—32	N 08—00 W	Je d' Triftian da Cunha	37—00	S 10—45 W
Forteventura	27—50	N 08—30 W			
Grand Canaria	27—48	N 10—03 W	Upon the Coast of <i>Brazil</i> .		
Teneriff	28—19	N 11—35 W	Cape Cors	03—45	S 33—56 W
Gomera	28—05	N 11—55 W	Baxos d' St. Roque	04—55	S 31—00 W
Palma	28—50	N 12—15 W	Rio Grandio	05—20	S 31—20 W
Ferro	28—00	N 12—20 W	Cape Blanco	07—00	S 30—23 W
			Pernambuco	07—40	S 31—30 W
Cape Olerado	23—40	N 09—40 W	Cape de Augustin	08—14	S 31—22 W
Cape das Barbas	22—00	N 11—15 W	R. Recal	11—45	S 34—00 W
Cape Blanco	20—40	N 11—50 W	I. de St. Catarina	17—50	S 35—30 W
Cape de Verde Islands			Cape St. Thome	22—00	S 37—36 W
St. Antonio	17—12	N 20—15 W	Cape Frio	22—34	S 38—16 W
St. Vincent	16—48	N 20—10 W	I. d' Grande	23—20	S 39—20 W
St. Lucia	16—45	N 19—52 W	I. d' St. Baltias	23—46	S 39—30 W
St. Nicola	16—35	N 18—48 W	Point St. Pedro	31—50	S 46—17 W
I. de Sal	16—44	N 16—35 W	Cape St. Maria	43—53	S 49—35 W
Bona Vista	16—05	N 16—45 W	Cape St. Antonio	36—35	S 50—27 W
St. Jago	15—10	N 18—05 W	Cape d' Todos Sanctos	12—55	S 36—40 W
I. de Mayo	15—15	N 16—43 W			
I. de Fugo	14—45	N 18—30 W			
I. Brava	14—35	N 18—52 W			
Abrolho	13—21	N 23—30 W			
Upon the Coast of <i>Guinea</i> .					
Cape de Verde	14—30	N 11—26 W			
Cape Maria	13—15	N 10—10 W			
Cape Vergas	10—10	N 07—58 W			
St. Cape Anna	07—10	N 06—25 W			

Note, According to Captain *Edmund Halley's* Observations, the Eastmost part of the Coast of *Brazil* ought to lie more Westerly than is generally laid, which is accounted for in this Table of Latitudes and Longitudes.

A TABLE of the Latitudes and Longitudes of the principal Capes, Headlands, Ports, Islands, Shoals, and Dangers in the *East-Indies*, between Cape *Bona Esperance* and *Japan*; Longitude reckoned from the Meridian of the *Lizard*.

Places Names.	Latitude	Longit.	Places Names.	Latitude	Longitude
C ape Bona Esperance	34—25 S	22—20	On the Island of <i>Zelon</i> .		
Delagoa	25—23 S	37—00	Hamans-Hill	09—38 N	86—35 E
Mozambique	15—05 S	46—20	Columbo	00—50 N	86—10 E
Mombasa	04—20 S	44—00	P. de Galla	05—50 N	86—15 E
Cape Bassas	04—00 N	54—30	Dundra-head	06—00 N	87—20 E
Cape Guardafoy	11—50 N	58—10	Great Bassas	06—20 N	89—00 E
I. Babelmandel	12—51 N	51—45	On the Island of <i>Sumatra</i> , and the Islands near adjacent		
Moha, or Moco	13—35 N	51—40	Achein	05—22 N	98—50 E
Muculla	14—45 N	56—00	Priaman	00—46 S	104—00 E
Defar	16—50 N	59—50	Bencola	03—48 S	106—50 E
C. Rosulgat	22—22 N	66—00	Engano	05—30 S	106—20 E
Muscat	23—25 N	64—45	Lufapera	03—16 S	111—06 E
Gombaroon	27—25 N	61—40	N. End of Banca	01—52 S	110—05 E
Buzaro	29—50 N	54—00	Andragera	00—20 S	106—00 E
R. Cinde	25—05 N	72—45	On <i>Java</i> and Islands near adjacent.		
C. Jacques	25—50 N	63—50	Bantam	06—35 S	110—30 E
Dau-head	20—42 N	76—15	Batavia	06—18 S	111—25 E
Surrat	21—00 N	79—00	Japarra	07—00 S	115—20 E
Bombay	19—00 N	78—20	Princes Island	06—32 S	109—25 E
Dabull	18—00 N	79—00	Bally	07—42 S	118—40 E
Goa	15—05 N	79—50	Madura	06—40 S	117—30 E
Carwar	14—30 N	80—15	On the Island of <i>Borneo</i> .		
Tellechery	11—32 N	81—30	Benjamafin	05—40 S	118—00 E
Cochin	09—47 N	82—00	Borneo	05—00 N	116—00 E
C. Camaroon	07—10 N	84—10	Succadana	00—50 S	114—20 E
Negapatan	11—02 N	86—08	Islands and Ports to the Eastward of <i>Borneo</i> .		
Fort St. David	12—03 N	86—00	Macassar on Celebes	05—06 S	122—00 E
Madraspatan, or	}	}	Bouton, N. end	04—20 S	125—20 E
Fort St. George			Teranate	00—45 N	129—15 E
Matulapatam	10—20 N	87—40	Bouro, N. point	03—10 S	128—00 E
Vozzagapatam	17—40 N	90—05	Ende	08—30 S	124—40 E
Point Palmiras	20—45 N	93—40	Amboyna	03—48 S	129—40 E
Hugley	23—07 N	94—35	Banda Islands	04—32 S	131—40 E
Bengall	22—30 N	97—00	Genu	07—28 S	131—30 E
Pegu River	17—50 N	101—00	N. End of Tymore	08—30 S	127—45 E
Mergi	12—00 N	102—05	Baboa Bay	09—57 S	125—00 E
Queda	02—06 N	104—10	<i>Philipina</i> Islands.		
Malacca	02—22 N	106—00	N. End of Laconia	18—40 N	124—15 E
Siem	12—47 N	107—45	Manilla	14—35 N	122—20 E
Camboidia	12—55 N	110—10	Mindora S. End	12—10 N	121—50 E
Tonquin	20—42 N	112—00	S. End of Mindanao	15—35 N	120—40 E
Canton	23—30 N	118—40	N. End of Pallaran	10—40 N	120—20 E
Amoye	24—25 N	122—30	Upon the Coast of <i>New-Britain</i> , <i>New-Guinea</i> , and <i>New-Holland</i> .		
Hockflew	26—27 N	123—40	Squally Island	01—10 S	151—30 E
R. Swadia	27—55 N	124—00	Pembroke Isle	03—03 S	154—10 E
Chufan	30—03 N	125—40	C. S. George	05—15 S	154—10 E
Upon the Island of <i>Madagascar</i> .			P. Montague	05—55 S	152—15 E
St. Mary's	16—55 S	56—00	K. Willam's Cape	06—10 S	149—25 E
Port Dauphin	24—20 S	53—20	Cape of Good Hope	00—25 S	136—20 E
St. Johns	25—33 S	50—20	C. Maba	00—45 S	132—30 E
B. S. Augustin	23—30 S	49—40	Diemens Land	10—10 S	131—05 E
Morandava	20—10 S	50—00	Fryal Rock	19—45 S	111—20 E
New Matheleage	15—45 S	52—55	Huntmans Arolbo	26—20 S	111—50 E
Atada	13—20 S	55—00	Islands along the Coast of <i>China</i> from <i>Malacca</i> to <i>Japan</i> .		
Islands between <i>Madagascar</i> and the Main.			P. Timozan	02—50 N	109—00 E
Bafia d' India	22—40 S	47—25	P. Capus	04—55 N	108—20 E
St. John d' Nova	17—33 S	48—00	P. Uby	08—37 N	110—00 E
Mayotta	13—10 S	50—50	P. Condore	08—43 N	112—30 E
Joanna	12—20 S	50—50	P. Cambello	16—22 N	113—15 E
Mohilla	12—15 S	49—20	S. Point of Aynam	17—52 N	114—30 E
Cemoro	11—30 S	48—55	N. Point of Paracells	16—43 N	115—50 E
Of the Islands and Shoals between the Meridian of <i>Madagascar</i> and the North End of <i>Sumatra</i> .			Maccas	22—15 N	113—25 E
Don Malcherenas	21—10 S	58—58	Praters	21—10 N	120—00 E
Mauritius	20—05 S	60—00	Piscadore Island	22—30 N	123—00 E
St. John d' Lisbon	25—50 S	59—59	Twyon on Formosa	22—35 N	124—20 E
Diego Rais	19—35 S	66—06	Gotto	32—15 N	129—40 E
St. Brandon	16—33 S	69—09	Ferando	33—50 N	131—00 E
Cardion de Graios	14.00 to 16.45 S	64—04	Foray	33—55 N	127—50 E
Malha	10.00 to 12.10 S	66—06	Meaco on Japan	35—30 N	135—35 E
I. d' Chargos	10.04 to 08.00 S	74.00 to 76.20			
I. Gama	01—40 S	83—00			
Candia and Adia	06—00 S	80—35			
Apalurio	09—40 S	89—40			

A TABLE of the Variation of the Compass, in divers parts of the Oriental and Southern Oceans, carefully observed in the Years 1744, and 1745.

Longitude reckoned from the Meridian of St. Jago.					Longitude reckon'd from Surrat.				
Latitude	Longit.	Var.	E. or W.		Latitude	Longit.	Var.	E. or W.	
Deg. Min.	Deg. Min.	Deg. Min.			Deg. Min.	Deg. Min.	Deg. Min.		
12—51	2—56	W 0—30	E		17—54	2—40	4—30	E	
16—26	2—29	W 1—02	E		16—32	4—35	5—00	E	
18—49	3—35	W 2—25	E		13—55	7—23	6—01	E	
20—43	1—02	W 1—30	E		12—14	12—50	6—54	E	
23—13	0—04	W 1—50	E		14—52	15—16	7—30	E	
26—00	1—30	W 3—40	E		16—50	17—00	8—27	E	
28—18	4—05	W 4—52	E		17—41	16—37	7—50	E	
30—44	0—45	E 3—10	E		18—30	3—05	4—50	E	
31—04	3—14	E 2—00	E		18—47	4—07	5—00	E	
35—35	5—44	E 1—10	E		17—35	6—45	5—51	E	
50—04	9—30	E 0—40	W		16—32	8—20	6—30	E	
36—10	15—20	E 4—11	W		15—25	11—25	7—27	E	
36—15	0—05	E 6—50	W		13—27	13—55	8—03	E	
36—07	23—54	E 8—56	W		11—55	16—07	8—50	E	
56—22	16—27	E 12—15	W		11—32	18—47	9—54	E	
35—30	30—25	E 14—10	W		11—32	21—31	11—40	E	
35—50	35—20	E 15—30	W		11—43	25—20	11—50	E	
34—55	38—50	E 15—30	W		14—42	3—18	4—40	E	
					12—02	5—10	5—25	E	
					9—07	6—40	6—00	E	
					5—34	8—03	6—50	E	
					3—50	8—55	7—00	E	
					0—03	8—55	7—20	E	
					6—32	9—50	9—00	E	
					12—55	7—03	8—50	E	
					14—40	8—30	10—24	E	
					16—35	10—30	12—00	E	
					21—40	13—30	15—30	E	
					22—45	16—50	17—40	E	
					22—15	20—00	19—50	E	
					24—20	21—40	21—20	E	
					26—25	23—40	23—05	E	
					27—25	25—10	24—00	E	
					18—00	11—40	13—40	E	
					21—35	13—50	15—30	E	
					23—12	14—40	17—00	E	
					26—55	19—30	22—40	E	
					30—10	24—24	25—00	E	
					34—37	35—00	25—00	E	
					35—15	35—50	24—00	E	
					35—18	41—30	23—10	E	
					36—00	45—15	21—40	E	
					35—40	53—55	17—40	E	
					35—00	55—25	17—25	E	

Longitude reckoned from the Meridian of Cape Bona Esperance.					Longitude reckon'd from Surrat.				
Latitude	Longit.	Var.	E. or W.		Latitude	Longit.	Var.	E. or W.	
Deg. Min.	Deg. Min.	Deg. Min.			Deg. Min.	Deg. Min.	Deg. Min.		
35—20	2—07	18—20			17—54	2—40	4—30	E	
36—10	3—30	19—01			16—32	4—35	5—00	E	
36—40	5—00	20—19			13—55	7—23	6—01	E	
36—00	8—00	21—10			12—14	12—50	6—54	E	
35—45	9—45	22—00			14—52	15—16	7—30	E	
35—03	10—55	22—30			16—50	17—00	8—27	E	
33—45	13—30	23—05			17—41	16—37	7—50	E	
33—40	17—02	24—25			18—30	3—05	4—50	E	
34—40	18—40	24—46			18—47	4—07	5—00	E	
32—15	21—25	25—00			17—35	6—45	5—51	E	
31—30	24—40	25—30			16—32	8—20	6—30	E	
29—50	27—10	25—00			15—25	11—25	7—27	E	
28—25	32—00	24—01			13—27	13—55	8—03	E	
28—00	34—30	23—36			11—55	16—07	8—50	E	
27—03	36—45	20—30			11—32	18—47	9—54	E	
25—50	38—00	19—21			11—32	21—31	11—40	E	
24—32	41—00	17—02			11—43	25—20	11—50	E	
23—00	43—21	15—30			14—42	3—18	4—40	E	
22—35	44—41	14—45			12—02	5—10	5—25	E	
21—03	46—40	13—00			9—07	6—40	6—00	E	
19—25	49—30	10—05			5—34	8—03	6—50	E	
17—25	51—02	9—07			3—50	8—55	7—00	E	
15—30	53—03	7—00			0—03	8—55	7—20	E	
13—45	54—05	5—00			6—32	9—50	9—00	E	
11—40	55—40	4—02			12—55	7—03	8—50	E	
9—02	57—23	2—45			14—40	8—30	10—24	E	
8—05	59—55	1—42			16—35	10—30	12—00	E	
7—21	62—25	1—00			21—40	13—30	15—30	E	
3—31	64—21	0—00			22—45	16—50	17—40	E	
0—40	66—19	0—00			22—15	20—00	19—50	E	
2—50	67—19	0—20			24—20	21—40	21—20	E	
6—10	68—05	1—00			26—25	23—40	23—05	E	
10—00	69—08	1—01			27—25	25—10	24—00	E	
12—45	71—11	0—05			18—00	11—40	13—40	E	
20—10	71—39	0—30			21—35	13—50	15—30	E	
20—30	72—10	0—40			23—12	14—40	17—00	E	

Explanation of the TABLE.

THE first Column sheweth the Latitude of the Places where the Observations were taken in Degrees and Minutes.

The second Column denotes whether the Latitudes are North or South.

The third Column sheweth the Longitude, reckoned from the Meridians of several Places in Degrees and Minutes, as the Titles inform you.

As for Example.

The first Title shews you that those under Observations were reckoned from the Meridian of St. Jago; the same is to be understood of the rest.

The fourth Column sheweth, whether you are to the Eastward or Westward of the Meridian of each respective Place.

The fifth Column sheweth the Quantity of the Variation in Deg. and Min.

The sixth Column sheweth the Quantity of the Variation (that is) whether it be East or West.

These Tables are judged to be very useful to those that go these Voyages, because, by the help of this Table, they may perceive whether their Variation come near to these, and thereby the better estimate their Meridian Distance for any of those Places mentioned in the Tables.

F I N I S.

